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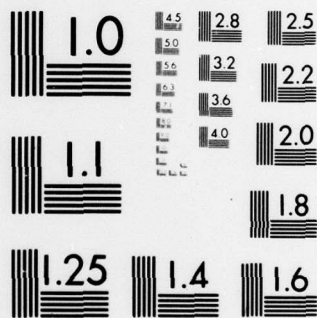
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AN ANALYSIS OF CAREER INTENT
AND JOB SATISFACTION OF FIRST
TERM AIR FORCE PERSONNEL

THESIS

GSM/SM/77D-25

James W. Patterson
Capt USAF

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AN ANALYSIS OF CAREER INTENT
AND JOB SATISFACTION OF FIRST
TERM AIR FORCE PERSONNEL.

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Presented to the Faculty of the School of Engineering
of the Air Force Institute of Technology
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in Partial Fulfillment of the
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James W./Patterson

Capt

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Preface

This thesis fulfills part of the requirement for a master of science degree in Systems Management from the Air Force Institute of Technology, Wright-Patterson AFB, Ohio. There are several reasons for this research. First, and most pressing, was that it was required. Second, I was interested in trying to find out the reasons for low Air Force retention rates. Third, the results of this research might be used by management to make the Air Force a better place to live and work. And last, the results might be useful to high level planners for the improvement of Air Force retention rates.

The results in this report are, for the most part, derived from generally accepted statistical procedures. When I have expressed my own opinions, I have tried to clearly identify these statements with such key words as "might, maybe, this writer believes" and other such cautions. Since my wife refuses to take the blame, I am forced to be held accountable for any and all errors found in this volume.

I would like to express my appreciation to Dr. Charles McNichols, my thesis advisor, without whose suggestions and general help this effort would have been exceedingly difficult. I would also like to extend my appreciation to Dr. Michael Stahl, thesis reader, who discouraged me from researching my first chosen topic. I would also like to thank him for his general and helpful guidance.

Finally, but not last, I must express my heartfelt thanks to my wife, Pat, for her understanding and help during the dire moments of this program. I also must thank her for the typing assistance.

James W. Patterson

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Abstract

This study analyzes career intent and job satisfaction of first term Air Force personnel. The data were obtained from a Quality of Air Force Life (QOAFLE) survey conducted in May and June of 1977. The analysis techniques used were the Automatic Interaction Detection (AID) algorithm, regression, factor analysis, and other selected subroutines from the Statistical Package for the Social Sciences (SPSS).

The survey was analyzed in terms of five first term groups: all first term personnel, enlisted, officers, non-rated officers, and rated officers. First term was defined to be all personnel with four years or less active duty and rated officers (pilots and navigators) with six years or less active duty.

The factors found to be most highly associated with career intent of first term Air Force personnel are:

- Importance of the retirement benefit
- Desirability of living on an Air Force base
- Job satisfaction
- Personal growth satisfaction

The factors found to be most highly associated with job satisfaction of first term Air Force personnel are:

- Job challenge
- Use of training and ability

It was found that the factors associated with career intent were not the same as the factors associated with job satisfaction.

AN ANALYSIS OF CAREER INTENT AND
JOB SATISFACTION OF FIRST TERM
AIR FORCE PERSONNEL

I. INTRODUCTION

The Purpose of the Report

Since the implementation of the All Volunteer Force (AVF), the services have not experienced great difficulty in securing recruits. The factors which made it possible for the services to recruit the needed manpower include: a series of manpower reductions, annual increases in the number of males reaching recruitment age, a sluggish national economy accompanied by a high unemployment rate among the enlistment-eligibles, and the services offering competitive monetary compensation. The apparent reversal of some of these factors has caused concern among personnel planners about the ability of the services to continue to secure an adequate number of recruits. The number of males reaching recruitment age each year is declining. Manpower reductions in the services have apparently come to an end. Questions are being raised about the ability of the services to maintain a competitive monetary compensation position with private industry. A recent report by the Defense Manpower Commission stated that "If rapid economic growth is realized, the supply of recruits will probably not be large enough to support needs of the services under current

policies and programs" (Defense Manpower Commission, 1976:20). As a result, there has been recent talk about reinstituting the draft to prevent the services from becoming undermanned.

The cost of military manpower is a major concern and has been receiving increased attention by the President, the Congress, and DOD. "Manpower costs accounted for 56 percent of the 1974 budget" (Defense Manpower Commission, 1976:vii).

A not insignificant part of this cost is the cost of personnel turnover. Typically, between 75 and 80 percent of enlisted personnel leave the service at the completion of their first term (Alley and Gould, 1975:5). This turnover leads to large expenditures for acquiring and training new recruits. In addition, DOD spends nearly one billion dollars annually on recruits that are involuntarily discharged before completing their initial enlistment term (Defense Manpower Commission, 1976:20).

It is hypothesized that personnel costs could be reduced if the turnover rate could be reduced. A reduction in the turnover rate would lead to reduction in the recruiting and training costs associated with new recruits. Unfortunately not much is known about how to reduce turnover, or about the factors associated with turnover.

It is the intention of this writer to explore the area of career intent of first term Air Force personnel. First

term personnel were chosen as the subject group because it has been shown that once a person extends beyond the initial service obligation, that person is very likely to remain in the service for a full career. In other words, the largest turnover of personnel occurs at the completion of the initial enlistment obligation.

It was the original intent of this writer to mainly explore the area of career intent. However, in a search of the literature it was found that job satisfaction was often used as a predictor of career intent or turnover, hence, it was decided to also explore the area of job satisfaction in the hope that career intent could be more fully explained.

In this paper, career intent and turnover will be used interchangeably. Although career intent is not the same thing as turnover, it has been shown (discussed later in this paper) that expressed career intent is very highly correlated with the actual turnover of personnel.

This study is not intended to prove or disprove any general hypotheses concerning job satisfaction or career intent. The study is only designed to describe the factors found, in this analysis, to be associated with career intent and job satisfaction of first term Air Force personnel.

Basis of the Study

In the spring of 1975, the Chief of Staff of the Air

Force established the Air Force Management Improvement Group (AFMIG). The purpose of this temporary group was "... to make a good service better: by examining the organization and management of the Air Force as they relate to or impact on the human resource; and by developing initiatives which enhance both the quality of leadership in the Air Force and the well-being of Air Force people" (Ellis, 1975). As part of the group's study activities, a 150 question Quality of Air Force Life (QO AFL) survey instrument was administered initially to a representative sample of active duty Air Force personnel, and later to samples of civilian employees, base commanders, and spouses of active duty personnel. The survey was composed of both general and specific questions pertaining to various aspects of Air Force life. Included in the survey were questions intended to determine the career intent and job satisfaction of the respondents. Career intent was determined from one question and job satisfaction was measured by combining four questions, which were modified versions of the four Hoppock (Hoppock, 1935) job satisfaction questions.

The survey included questions referred to as Quality of Air Force Life Indicators (QO AFLI). The nine QO AFLI areas are defined as follows:

Economic Standard: Satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

Economic Security: Guaranteed employment; retirement benefits, insurance; protection for self and family.

Free Time: Amount, use, and scheduling of free time alone, or in voluntary associations with others; variety of activities engaged in.

Work: Doing work that is personally meaningful and important; pride in my work; job satisfaction; recognition for my efforts and my accomplishments on the job.

Leadership/Supervision: My supervisor has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

Equity: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

Personal Growth: To be able to develop individual capacities, education/training; making full use of my abilities; the chance to further my potential.

Personal Standing: To be treated with respect; prestige; dignity; reputation; status.

Health: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care and services provided.

Each QOAFLI was composed of a question relating to the importance of the QOAFLI and a question relating to the satisfaction of the QOAFLI.

The survey used in this report was a follow-on QOAFL survey of active duty military personnel. This second QOAFL survey is essentially the same as the first one with a few minor changes. The survey (see Appendix A) consists of 165 questions, including career intent, job satisfaction, and various general and specific questions.

Assumptions

The first assumption to be made is that the survey data is representative of the Air Force population. This is an important assumption since the author did not participate in the collection of data.

The second assumption is that those who express career intent will act consistently with their stated intentions. This assumption seems to be fairly valid in light of findings (Kraut, 1975; Waters, et.al., 1976; Alley and Gould, 1975; and Shenk and Wilbourn, 1971) regarding expressed career intent and actual reenlistment.

Third, it is assumed that the responses are themselves valid. Every attempt has been made to eliminate those individual surveys that contained obviously erroneous data.

Limitations

One limitation is that, since the survey subjects were guaranteed anonymity, there will be no possibility of following up survey results.

A second limitation is the survey itself. The only answers available are those to the questions that were asked.

Most Recent Research

The first QOAFM military survey was analyzed by Thompson (1975) and Vrooman (1976).

Thompson looked mainly at the job satisfaction of all

survey respondents. Vrooman looked at both job satisfaction and career intent in his analysis.

This study differs from that performed by Vrooman in that he studied all officers and enlisted personnel with less than six years of service. It is suggested that by including non-rated officers and enlisted personnel with four to six years of service in his analysis, some of the conclusions and correlations he found would not be applicable to first term personnel. The four to six year non-rated officer and enlisted group contains largely those personnel who have decided on making the service a career.

This study differs from those performed by both Thompson and Vrooman in that the selection of the independent variables used in the analysis was not done on some a priori basis. It was felt that by selectively choosing the independent variables to be used in their analyses both Thompson and Vrooman necessarily limited the results that they could possibly obtain. The independent variables used in this study were not selectively limited to a chosen few. Rather, most questions in the survey were initially used as independent variables. Exceptions were Air Force Specialty Code (AFSC), base code, and the command of assignment questions.

Summary

The research explores the two areas of career intent and job satisfaction of first term Air Force personnel.

First term personnel include rated officers with six years or less active duty and non-rated officers and enlisted personnel with four or less years of active duty.

A 165 question QOAFI survey of active duty Air Force personnel supplied the necessary data for analysis. The survey used is the second in a series of QOAFI surveys. The survey was completed by more than 10,000 active duty Air Force personnel.

This chapter presented a brief outline of the survey and previous research on the first QOAFI survey. Also mentioned were the limitations and assumptions of the present research effort.

The intention of this research effort is to attempt to identify those factors which induce individuals to stay in the Air Force and those factors which induce individuals to leave. It is also intended to attempt to identify those factors which are related to or can be used to describe and predict job satisfaction or job dissatisfaction.

II. CONCEPTUAL BACKGROUND

Introduction

This chapter is a brief review of what other researchers have found to be of importance when writing on career intent and job satisfaction. Of primary interest is the subject of career intent because, as stated earlier, the study of job satisfaction in this paper was only undertaken in the hope that career intent might be more fully understood or explained.

When most researchers speak of turnover they have a very definite measure with which to deal; either an individual is still with a firm or he has terminated his employment. Thus, most writings speak of turnover or job tenure. This research effort is at a disadvantage in that it is impossible to determine whether a particular survey respondent either has or will leave the Air Force. For purposes of this study, it necessarily has to be assumed that an individual's actions will be consistent with his expressed career intent. Thus, it is assumed that expressed career intent is a valid measure of turnover or future job tenure. This assumption is discussed later in this chapter.

Job satisfaction has been researched by many individuals with the result that several and sometimes conflicting theories have been advanced. A few of these theories such as Maslow's Hierarchy of Needs, Vroom's Valence/Expectation

Theory, and Herzberg's Two Factor Theory are well known.

Job satisfaction has been found to be a function of many variables. Some of these variables associated with job satisfaction are pay, promotions, skill of the worker and skills required of the worker, job challenge, use of abilities, relationships with supervisors, subordinates, and peers, place of work, family relationships, personal needs and requirements, and many other factors. It is the writer's opinion that not all of these factors can be easily controlled nor should control of some of them even be attempted.

Previous Research (Air Force)

In a research work comparing the personal value systems of men and women officers in the USAF, Bartholomew (1973: 143) came to the conclusion that officers with two-to-four years of service seemed to have different value orientations than other officers resulting in dissatisfaction with the Air Force. This dissatisfaction was accompanied by negative career intentions.

Prior to the institution of the AVF, a study of officer attitudes as related to career decisions was conducted on 4,006 officers (Shenk and Wilbourn, 1971). It was noted that retention rates were related to such factors as source of commission, reserve or regular commission, and whether the officer was rated or non-rated. The two factors of sat-

isfaction with the job and educational opportunities were considered by the subjects as having the most positive influence on career intent. It was found that "the factors considered most important revolve around job satisfactions such as feelings of accomplishment and promotion on the basis of ability. Less important values seem to be attached to such factors as settling in a certain area, early retirement and travel" (Shenk and Wilbourn, 1971:4). Also pointed out was that there was a definite correlation between career intent and career decision.

Alley and Gould (1975) analysed survey responses from more than 50,000 Air Force enlisted personnel. They found that there was a high correlation between intent and the actual career decision. Job interests and utilization of talent and training were also related to career decisions although to a lesser extent than was the career intent statement. As time in service increased the average job attitudes became negative. The percentage of fourth-year airmen finding their jobs dull and their training and talents underutilized was higher than that of all first-term airmen. This is surprising because as airmen become knowledgeable and experienced, the job they are utilized in should be becoming more demanding with increased technical and supervisory responsibilities.

Thompson (1975) analysed data obtained in a 150 question Quality of Air Force Life (QOAFLE) survey conducted in

1975. He noted that there was a steady decline in job satisfaction for non-rated officers and enlisted personnel with less than four years of service. The same trend existed for rated officers at the five to six year point. He found that job satisfaction was positively correlated with career intent. Job satisfaction was in turn related to job challenge, autonomy, and job growth; the feeling of preparing for greater responsibility. He further came to the conclusion that "the basic physical and social needs of most people in the Air Force are either largely satisfied or are at least considered, for some reason, relatively unimportant" (Thompson, 1975:139).

Vrooman (1976) analysed data from the same QOAF survey that Thompson did, only he looked at all members with six or less years of active service. He stated that personal standing, satisfaction with personal growth, leadership and supervision, and work related factors were the most important factors related to job satisfaction and career intent. The personal growth factor was the most important factor in explaining career intent. He concluded that career intent and job satisfaction could be explained by the same factors (Vrooman, 1976).

Previous Research (Other)

Reviews of the literature by Brayfield and Crockett (1955), Herzberg, Mauser, Peterson and Capwell (1957), Porter and Steers (1973), and Vroom (1964) have indicated

a consistent and inverse relationship between job satisfaction level and turnover. However, this relationship has typically been a weak one when measured in terms of correlation.

Pritchard and Peters (1974) gathered data on job duties, job interests, and job satisfaction from 629 enlisted naval personnel. They stated "that the types of job a person foresees for himself at the time he considers his first reenlistment may be a significant determinant of his decision to stay or to go" (Pritchard and Peters, 1974:328). They made the interesting speculation that turnover may be more related to rewards such as pay, promotion, security, etc., rather than internal satisfaction received from the job (p.329).

Tingey and Gordon (1974) in a study of 437 scientists and engineers who had left a variety of organizations, found that most left due to motivational factors. These motivational factors included such items as disliked nature of work, better opportunities to use skills, and a lack of opportunity for advancement. This study points to the fact that higher-order needs tend to dominate the outlook of professional and scientific personnel. This type of person is likely to terminate employment with an organization which does not provide adequate satisfaction of those higher-order needs, unless he or she has become locked into the organization for one reason or another

(Tingey and Gordon, 1974).

Flowers and Hughes (1973) took a different approach to the problem of turnover by trying to determine why employees stayed with an organization. They found that low-skill manufacturing employees stayed primarily because of fringe benefits, job security, family responsibilities, tight job market, and several other factors outside the company. It was further stated that "these employees will not remain on the payroll because of job satisfaction" (Flowers and Hughes, 1973:54). In sharp contrast, managers and professionals stayed primarily for reasons related to their work and the work environment. They concluded that "age, length of service, type of work and skill level, race, and education described who stays, and for what reason, the underlying (individual) value system explains why" (p.58).

Turnover Predictions

One of the problems that personnel planning agencies must face is the problem of predicting future turnover. It has been found that the best predictor of future tenure is the employee himself (Kraut, 1975; Waters, et.al., 1976; Shenk and Wilbourn, 1971). Shenk and Wilbourn in a study of 4,006 Air Force officers, found that 93 percent of those stating that they definitely did not want to be career officers actually left the service, while 89 percent of those who expressed a definite career intent actually remained on active duty (Shenk and Wilbourn, 1971:2).

Alley and Gould in a survey of 52,295 first term enlisted personnel found that 4.33 percent indicated definite career intent and 14.81 percent indicated probable career intent. An analysis showed that of the 2266 airmen who expressed strong intent to reenlist, 60.4 percent actually did reenlist. Of the 21,876 airmen who expressed strong intentions of separating, 92.6 percent did separate from the service (Alley and Gould, 1975: 10).

The above percentages were taken from a group of airmen who were in their first four years of service. As the personnel surveyed became closer to their reenlistment time, the correlation between actual separation or reenlistment and expressed intent became higher. An analysis of personnel in their fourth year of service revealed that those individuals who definitely planned to reenlist did so 75.9 percent of the time while those who planned to separate did so 95.9 percent of the time (Alley and Gould, 1975: 10).

Summary

This chapter has mentioned several factors which have been associated with career intent and job satisfaction. Some results of recent research were presented. Also included was an examination of the results of some studies which investigated the relationship between expressed career intent and the actual decision of leaving or staying in an organization. This correlation between expressed

intent and the actual career decision was found to be quite high. This high correlation forms the basis for the assumption in this paper that expressed career intent can be used as a reasonably good approximation of actual future turnover or tenure. Thus, the career intent question (question 14) can and was used in this study as a measure of turnover.

III. METHODOLOGY

Introduction

This chapter presents not only the methodology used but also that part of the analysis that was common to both the career intent and job satisfaction analyses.

The Survey

The survey used in this study was a Quality of Air Force Life (QOAFLE) survey. The entire text of the survey is reproduced in Appendix A. This survey was an updated version of the AFMIG survey conducted during May and June of 1975. The survey was administered to a random sample of people throughout the Air Force. A total of 10,687 surveys were returned.

The survey consisted of 165 questions. The first 19 questions provide demographic information. The remainder of the survey consists of questions which solicit opinions on a variety of subjects related to the quality of Air Force life.

Survey Bias. To insure a large enough sample of females, people in higher ranks, and racial minorities, these groups were deliberately oversampled.

To correct the bias induced by this oversampling, a weighting procedure is used in analyzing survey results. In the case of the present study, the cases (individual responses) were weighted according to rank. This procedure

allows each individual case to be considered or weighted more or less heavily than other cases. For instance, if a particular rank has a weighting factor of three, then the responses of a person with that rank will be counted three times as heavily as a person of a different rank whose weight is one. If all of the survey cases are multiplied by their respective weights, then the total number of cases will equal the total number of Air Force personnel. The weights used in this study (rounded to whole numbers) were:

<u>RANK</u>	<u>WEIGHT</u>	<u>RANK</u>	<u>WEIGHT</u>
Colonel	6	MSGT	41
Lt. Col	14	TSGT	82
Major	23	SSGT	143
Captain	44	SGT	187
1 Lt.	17	SRA	187
2 Lt.	13	A1C	121
W. Off	1	AMN	182
CMSGT	5	AB	56
SMSGT	12		

It should be noted that the race and sex bias was not corrected for. This lack of correction for bias is not felt to have been detrimental to the study because neither factor was found to be significant in any of the analyses conducted.

Study Sample

The cases used in this study were extracted from

the total sample by using the criteria of years of service, rank, and aeronautical rating. The first study subpopulation was extracted by selecting those personnel with four or less years active service and those rated personnel with six or less years of service. Upon examination of this first sample it was found that some personnel with less than four years of service claimed to have a higher rank than it is possible to attain in four years (i.e. Warrant Officer, CMS, etc.), these erroneous cases were then removed by using rank as a criteria. The final study sample is composed of enlisted personnel with four or less years of service and a rank of staff sergeant or lower, non-rated officers with four or less years of service and a rank of Captain or below, pilots and navigators with six or less years of service and a rank of Captain or below.

The study sample is composed of the following:

Enlisted	1908
Officer	<u>1253</u>
	3161

With the officer population broken down as follows:

Rated Officers	441
Pilots	271
Navigators	170
Non-Rated Officers	<u>812</u>
	1253

Analysis Groups

An analysis is presented for each of the follow-

ing five groups of first term personnel:

- Group 1 - All personnel
- Group 2 - Enlisted personnel
- Group 3 - Officer personnel
- Group 4 - Non-rated officer personnel
- Group 5 - Rated officer personnel

Analysis Techniques

The analysis was performed using AID (Automatic Interaction Detection algorithm), Regression analysis, Factor analysis, and selected routines from the Statistical Package for the Social Sciences (SPSS) (Nie, et. al., 1975).

It is felt that regression analysis and factor analysis routines are common methods of analysis and are not expounded upon in this paper.

Regression. Stepwise regression was selected as the regression method used in this study. Pairwise deletion of missing data was utilized. That is, a missing value for a particular variable causes that case to be eliminated from calculations involving that variable only. Listwise deletion of missing data implies that a case with a missing value is eliminated from all calculations. It was felt that by using pairwise deletion instead of listwise deletion that there would not occur much distortion of results because of the large number of cases involved.

Automatic Interaction Detection Algorithm. The AID algorithm was first developed by Sonquist and Morgan (Sonquist and Morgan, 1964).

In this procedure, the variation of one specified variable, the criterion is "explained" in terms of other variables, the predictors. "Explanation" is accomplished through a sequence of two way splits. In each case, the split is done on that predictor that maximizes the between sum of squares (BSS) in terms of the criterion variables where BSS is equal to the sum of all squared differences between each subgroup average and the overall average. Since the within group sum of squares (WSS) for the criterion, i.e., sum of squared differences from the mean for the criterion scores remains constant and R^2 equals BSS divided by WSS, this process also maximizes R^2 . For each split in this process, a cumulative level of significance is calculated using an "F" test. In this manner, the variation of the criterion is explained by those predictors that are statistically significant (Scoville, 1976:28).

AID splits the population into two groups on the basis of a predictor variable which explains the largest variation of the criterion variable. These resultant groups are then further split into other subgroups, and the splitting continues until the selected stopping criteria is reached. The resulting groups can then be printed out in the form of a tree, thus giving the researcher a pictorial display of the various groups, their relationship to each other, group means and standard deviations, and the cumulative R^2 value. AID is unique in that a predictor variable can be either nominal or ordinal in nature, and the algorithm is able to select those values of the predictor variable which explain the variation of the criterion variable.

AID was used in this paper not only as a means of studying job satisfaction and career intent but also as a means of selecting those variables to be used in the regression analysis.

Factor Analysis. This analytical technique was used to insure that the four job satisfaction questions (questions 57-60) could be validly combined to measure the one factor of job satisfaction. The linear combination of these four questions is known as the Hoppock job satisfaction measure (Hoppock, 1935).

Other Analytical Methods Used. Two other statistical routines, Crosstabs and Breakdown, from SPSS (Nie, et.al., 1975) were used in the analysis.

Subprogram Crosstabs computes and displays crosstabulation tables. A crosstabulation is a joint frequency distribution of cases according to two or more variables. Crosstabs was used to find the distribution of career intent versus rank and years of service.

Subprogram Breakdown calculates and prints the sums, means, standard deviations, and variances of a dependent variable among subgroups of the cases in the file. This operation is analogous to crosstabulation where each mean and standard deviation summarizes the distribution of a complete row or column of a contingency table. Breakdown was used to find the distributions of job satisfaction versus rank and years of service.

Analysis

Because of the fact that this study treats two major topics, that part of the analysis common to both topics is presented in this section. This presentation eliminates

the need to repeat these common features in both the career intent and job satisfaction chapters.

Variable Transformations. The responses to questions 14 (career intent), 57, and 60 were reversed. This reversal was necessary to facilitate the statistical analysis. The intent of the reorderings was to present these questions with responses ranging from low to high. The alphabetical responses of all questions were transformed to numeric responses. The transformations were of the form A=1, B=2, C=3, D=4,....

Questions 166-174 were derived from the nine Quality of Air Force Life Indicators (QOAFLI). These nine additional questions were formed by dividing each QOAFLI question into three segments. For instance, the importance question was divided into the three segments of moderate importance, high importance, and very high importance. The segments from each QOAFLI were then combined in a manner analogous to the responses for questions 94-116 (see Appendix A).

The responses then had the form:

- A. Moderate importance, highly dissatisfied
- B. Moderate importance, neutral
- C. Moderate importance, highly satisfied
- D. High importance, highly dissatisfied
- E. High importance, neutral
- F. High importance, highly satisfied
- G. Very high importance, highly dissatisfied
- H. Very high importance, neutral
- I. Very high importance, highly satisfied

It was felt that by combining the QOAFLI questions in this manner, one might be able to more fully explain

career intent or job satisfaction. For instance, if a respondent considered the QOAFLI of Economic Security to be of very high importance and yet was highly dissatisfied, then this might help to explain low career intent or low job satisfaction.

Question 175 is the Hoppock job satisfaction measure. It is a linear combination of questions 57, 58, 59, and 60. The numerical range of this variable ranges from a possible low of 4 and a possible high of 28 representing low and high job satisfaction respectively.

Question 176 is the computed weight variable for each case.

In addition to the above transformations a number of nominal type questions were broken up into dummy variables for use during the regression analysis.

Selection of Variables. All of the questions in the survey (excepting base code (questions 1 and 2), command of assignment (question 4), and AFSC code (questions 15-17)) plus the new QOAFLI (questions 166-174) and job satisfaction variables were initially employed in the AID analysis using both career intent (question 14) and job satisfaction (question 175) as dependent variables.

Because the number of variables in the survey exceeded the AID limitations, three AID analyses had to be made for each group for both career intent and job satisfaction. The first run employed one half of the variables as pre-

dictors and the second run used the remaining variables as predictors. The stopping criteria for these AID runs was either a maximum of 30 groups or a minimum of 20 cases in each group. The final AID run was made using all the variables that emerged in the first two runs plus any variables not included in the first two runs.

This manner of selecting the independent variables to be used in the final run was employed because the writer did not feel that selecting independent variables on some a priori basis was justified. Both Thompson (1975) and Vrooman (1976) in their analysis of the first QOAFI survey selected their independent variables on an a priori basis. As a consequence, neither of them included some variables that were found to have both predictive and explanatory power.

The variables used in the regression analysis portion of the study were those obtained during the AID analysis. A predictor that showed up in any of the AID runs, no matter what group was being analysed, was used in the regression analysis for each group. This manner of variable selection enables the writer to validly compare the results obtained in each group, because the same variables were used for each group.

Elimination of Variables. During the initial runs the majority of the new QOAFI (questions 166-174) variables did not exhibit very high correlations with either career intent or job satisfaction. In addition, the ones that did

correlate in the AID analysis proved to be uninterpretable. As a consequence, these variables were subsequently deleted from further consideration.

In the course of the analysis a number of other questions in the survey proved to be unusable and were dropped from further consideration.

These questions were:

1. Questions 48 and 49 - Responses "N" and "O" correlated with both career intent and job satisfaction. However due to the nature of the responses, this correlation added no knowledge to the analysis.
2. Questions 55 and 56 (Work QOAFLI) - These QOAFLI questions had very high correlations with job satisfaction. However, this author does not believe that using work satisfaction as a predictor of job satisfaction adds any knowledge to the analysis, consequently they were dropped from the analysis.
3. Questions 57, 58, 59, and 60 - Replaced by question 175.
4. An examination of the responses given to questions 77-86 demonstrated the fact that this particular block of questions was very difficult to answer, resulting in erroneous responses. These questions were used in the AID analysis and they proved to be uninterpretable.
5. Questions 94-114 - While some of these variables

correlated with career intent and job satisfaction, the groupings obtained proved to be uninterpretable. They were subsequently dropped during the AID analysis phase. These questions were each split into two variables (one measuring standard and one measuring enforcement) for the regression analysis.

6. Questions 115 and 116 - This writer could find no relationship between the questions and the required responses.

Selection of Variables To Be Presented. Due to the large number of cases employed in the analysis, many variables were found to be significant at the .0001 level. Thus, the number of variables included in the final regression equations and AID trees, using significance criteria alone, were many. In order to reduce the number of variables to be presented and to make the results more understandable and meaningful the following selection criteria was used:

Regression:

- A maximum of five variables in an equation
- A variable must increase the amount of explained variance by at least 1.9 percent

AID:

- No more than four split levels
- A variable must increase the amount of explained variance by at least one percent

Summary

This chapter has outlined the essence of the analytic procedures used along with brief explanations of some of the procedures. Regression analysis, the Automatic Interaction Detection algorithm (AID), Factor analysis, and the SPSS subprograms of Crosstabs and Breakdown were used to identify those factors associated with job satisfaction and career intent.

That part of the analysis common to both career intent and job satisfaction was also presented. These common features included variable transformations, selection of variables, elimination of variables, and the criteria used in the selection of variables to be presented.

IV. CAREER INTENT ANALYSIS RESULTS

Introduction

This chapter presents the results of the career intent analysis. A list of the questions used in the final AID and regression analyses can be found in Tables XXI and XXII, Appendix B.

The analysis results presented in this chapter are presented in a negative manner, that is, the attributes of the subset of respondents with low career intent are described. The results are presented in this way because the factors associated with low career intent are of primary interest. Generally, the results can be reversed to describe those personnel with high career intent. In other words, if low career intent is described by low job satisfaction, then high career intent would be described by high job satisfaction.

Table I, p.30, presents the average career intent broken down by group, rank, and years of service. Table II, p.31, presents an analysis by rank and years of service of the percentage of personnel who indicated either definite or probable intentions of making the Air Force a career.

Tables I and II reveal the fact that a graph of career intent either by grade or years of service would exhibit a "U" shape. In other words, career intent, at first declines and then it increases. It is interesting to note that low ranking and low years of service personnel have

Table I
Average Career Intent
(First Term Groups)

	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
Group	2.76	2.69	3.34	3.27	3.43
CAPT	3.34		3.34	3.15	3.45
1 LT	3.23		3.23	3.13	3.37
2 LT	3.51		3.51	3.51	3.50
SSGT	3.32	3.32			
SGT	2.84	2.84			
SRA	2.52	2.52			
A1C	2.53	2.53			
AMN	2.65	2.65			
AB	3.20	3.20			
Years Service					
0	3.03	3.01	3.35	3.32	3.43
1	2.58	2.55	3.12	3.12	3.12
2	2.47	2.39	3.22	3.20	3.29
3	2.67	2.60	3.18	3.00	3.51
4	2.99	2.85	3.62	3.68	3.54
5	3.28		3.28		3.28
6	3.50		3.51		3.51

1 = Definitely do not intend to make the Air Force a career
2 = Most likely will not make the Air Force a career
3 = Undecided
4 = Most likely will make the Air Force a career
5 = Definitely intend to make the Air Force a career

Table II
% Indicating Definite or Probable Career Intent
(First Term Groups)

	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officer	Rated Officer
Group	26.2	23.8	46.1	45.3	48.9
CAPT	48.0		48.0	44.9	49.7
1 LT	44.2		44.2	42.4	47.0
2 LT	49.0		49.0	48.8	50.0
SSGT	58.8	58.8			
SGT	31.5	31.5			
SRA	22.6	22.6			
A1C	18.7	18.7			
AMN	17.9	17.9			
AB	37.0	37.0			
Years Service					
0	30.5	29.7	42.1	39.9	53.5
1	18.0	17.0	36.0	38.3	35.4
2	19.8	17.4	42.2	42.6	41.8
3	30.1	27.9	45.7	43.4	54.9
4	36.1	31.6	56.1	63.0	49.9
5	48.5		48.5		48.5
6	49.1		49.1		49.1

higher career intent than those personnel with slightly more rank or years of service. This could indicate that personnel are entering the Air Force with high expectations which later prove to be unrealistic. Whether these unrealistic expectations are due to the recruiting methods or the individual's fantasy can only be conjecture.

Alley and Gould (1975) found that 19.14 percent of first term enlisted personnel indicated either definite or probable career intent. It was found in this study (see Table II) that 23.8 percent of first term enlisted personnel indicated either definite or probable career intent, which is almost a 5 percent increase. This apparent increase in career intent attitude could be due to the effects of the AVF (All Volunteer Force) policy, the absence of a war, the tight job market, or a number of other things. The reader can draw his own conclusions as to why this positive career intent attitude is increasing.

AID Results

The AID trees for each group are presented in figures 1-5. Each box in the AID tree represents a subgroup of the population being studied. Shown in the box for each subgroup is the average career intent, the number of persons in the subgroup, a brief description of the predictor variable, the cumulative R squared value, and the group number (lower right hand corner). The response codes for the predictor variable are shown in parentheses below the

predictor name. The response codes are interpreted as follows: 1=A, 2=B, 3=C, etc. where A, B, C, are the responses given by that subgroup to the survey question (predictor variable). A summary of the results is presented in Table III, p.43.

Table III indicates that three questions are significant predictors in the career intent AID analysis. The first of these is question 42, the importance of the retirement benefit. This predictor was significant in every AID analysis, with the exception of the rated officer group. The responses for question 42 range from low importance to high importance using a seven point scale. In every case, except for the rated officer group, this variable was used in the first AID split. The R^2 values for this first split on the importance of the retirement benefit ranged from 11 to 15 percent. Those persons who consider military retirement to be of relatively high importance also had relatively high career intent.

The second variable which emerged as a predictor in every career intent AID analysis was question 175, the Hoppock job satisfaction measure. It is important to note that in every group, except for the rated officer group, this predictor does not appear until the third or fourth level in the AID tree. This seems to agree with the observations of Brayfield and Crockett (1955), Herzberg, Mauser, Peterson and Capwell (1957), Porter and Steers (1973), and

Vroom (1964) that the magnitude of the relationship between job satisfaction and turnover has typically not been very high.

The third variable which emerged as a significant predictor of career intent was question 50. Question 50 is as follows: An Air Force base is a desirable place to live. The responses to this question ranged from strongly disagree to strongly agree using a five point scale. This question emerged as the second most powerful predictor for all the groups with the exception of the rated officer group where it was the third most powerful predictor. Those persons who felt that an Air Force base was not a desirable place to live belonged to subgroups which had relatively low career intent. It appears that living on base is a benefit negatively viewed by a large number of first term Air Force personnel.

First Term AID Analysis. The AID tree for first term personnel is shown in figure 1, p.35. As can be seen the tree is symmetrical for the first two levels indicating that the same factors describe both the high and the low career intent groups.

The first split was made using the retirement benefit question. This question alone explains 15 percent of the variance in career intent of first term personnel. Subgroups (3), (5), (7), (9), and (11) contain those personnel who have lower career intent. An analysis of these subgroups

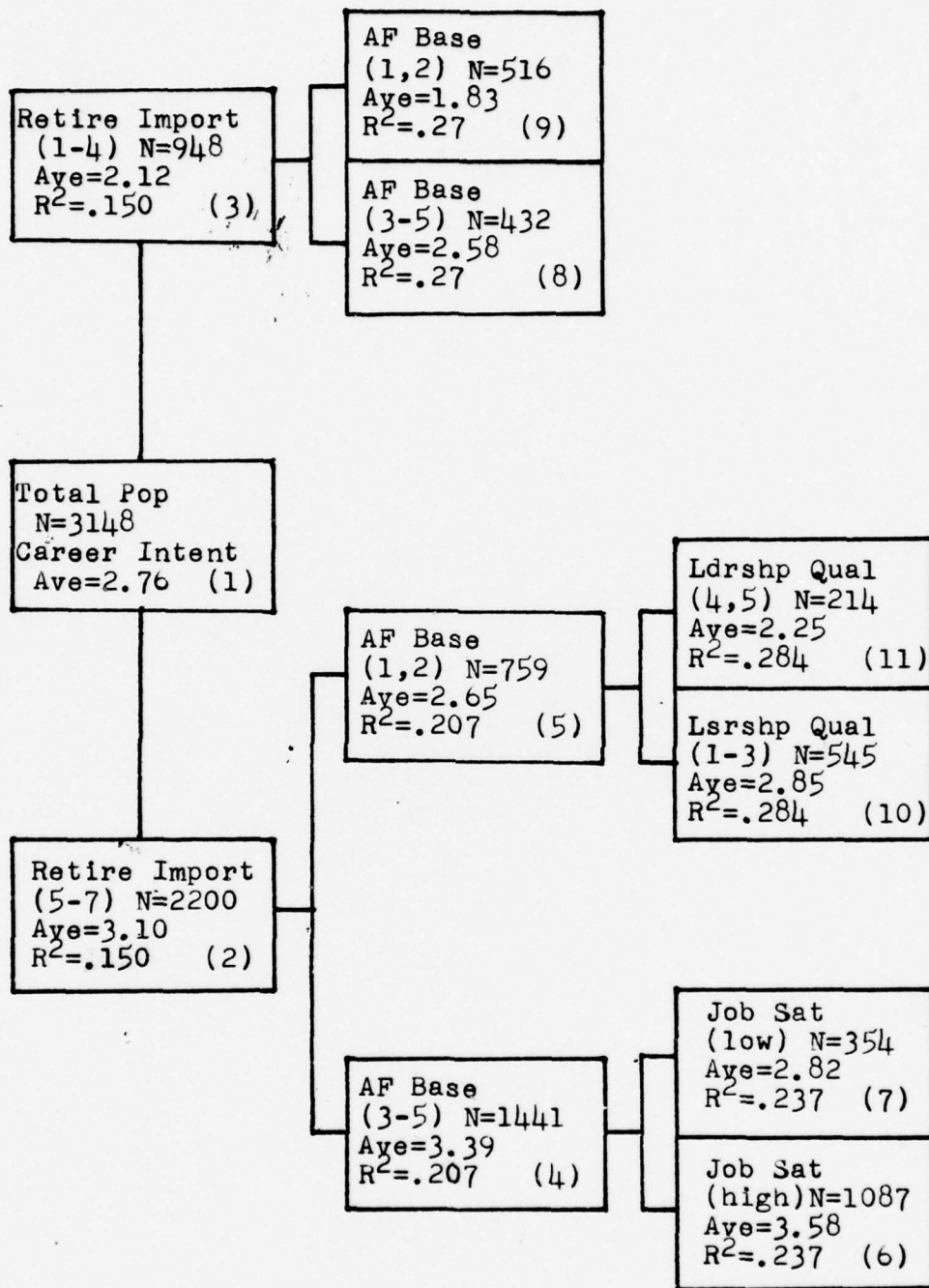


Figure 1. Career Intent AID Tree
(All First Term Personnel)

shows that first term personnel with relatively low career intent can be described by the following:

- View the retirement benefit as relatively unimportant
- View an Air Force base as an undesirable place to live
- View the quality of Air Force leadership to be below average or poor
- Have relatively lower job satisfaction

These four variables are able to account for 28.4 percent of the variation in career intent of first term Air Force personnel.

Enlisted AID Analysis. The AID tree for enlisted personnel is presented in figure 2, p.37.

The first split was made using the retirement benefit question which was able to explain 14.9 percent of the career intent variance. Subgroups (3), (5), (7), (9), (11), (13), (15), and (17) contain those personnel who have relatively low career intent. An analysis of these subgroups shows that first term enlisted personnel with relatively low career intent can be described by the following:

- View the retirement benefit as relatively unimportant
- View an Air Force base as an undesirable place to live
- Have lower job satisfaction
- Believe that they can get more of an even break in civilian life than in the Air Force
- Are relatively dissatisfied with their personal growth

Officer AID Analysis. The AID tree for first term officer personnel is shown in figure 3, p.38.

The first split was made using the retirement benefit question which was able to explain 11 percent of the variance in career intent. Subgroups (3), (5), (7), (9),

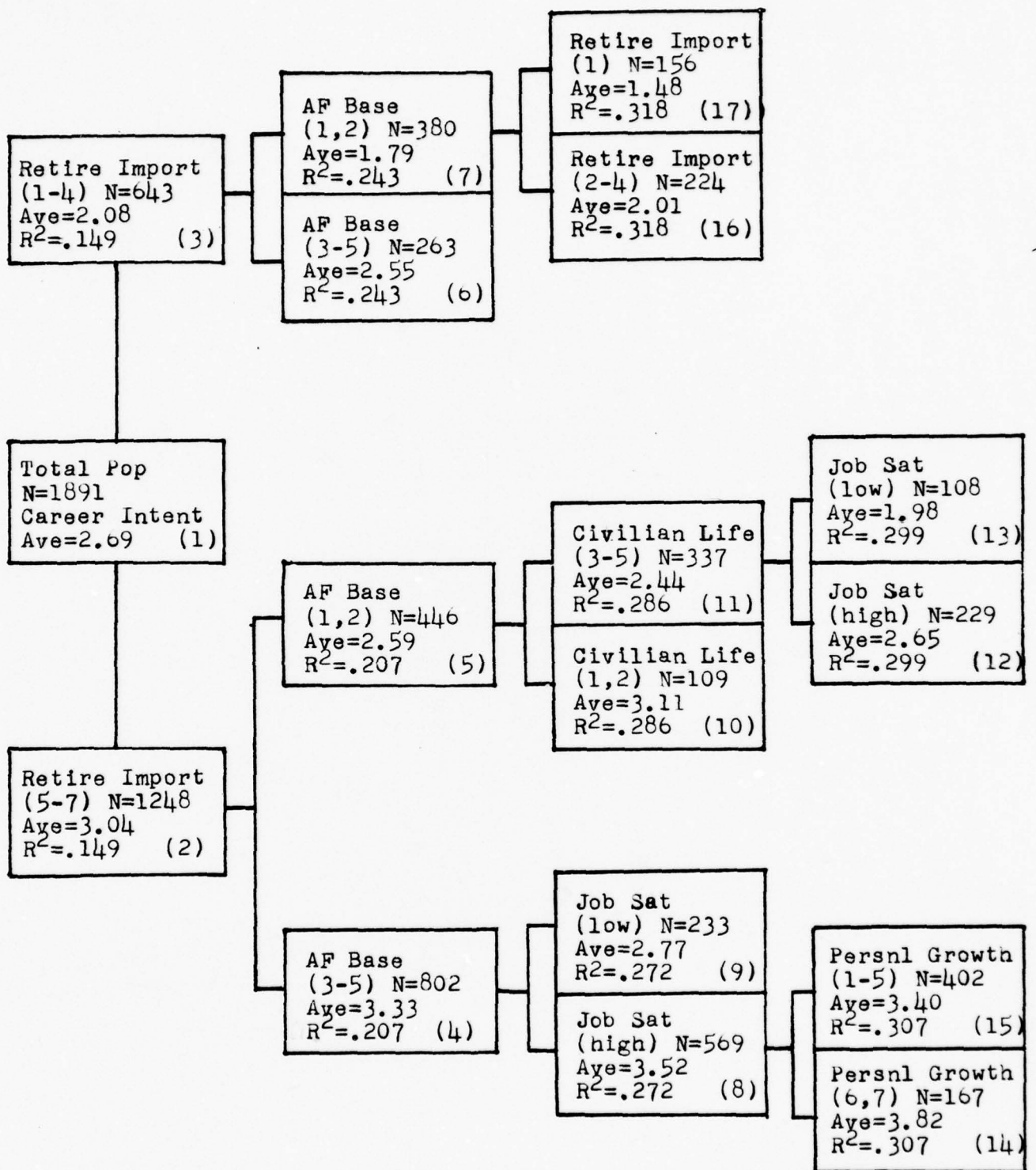


Figure 2. Career Intent AID Tree (First Term Enlisted Personnel)

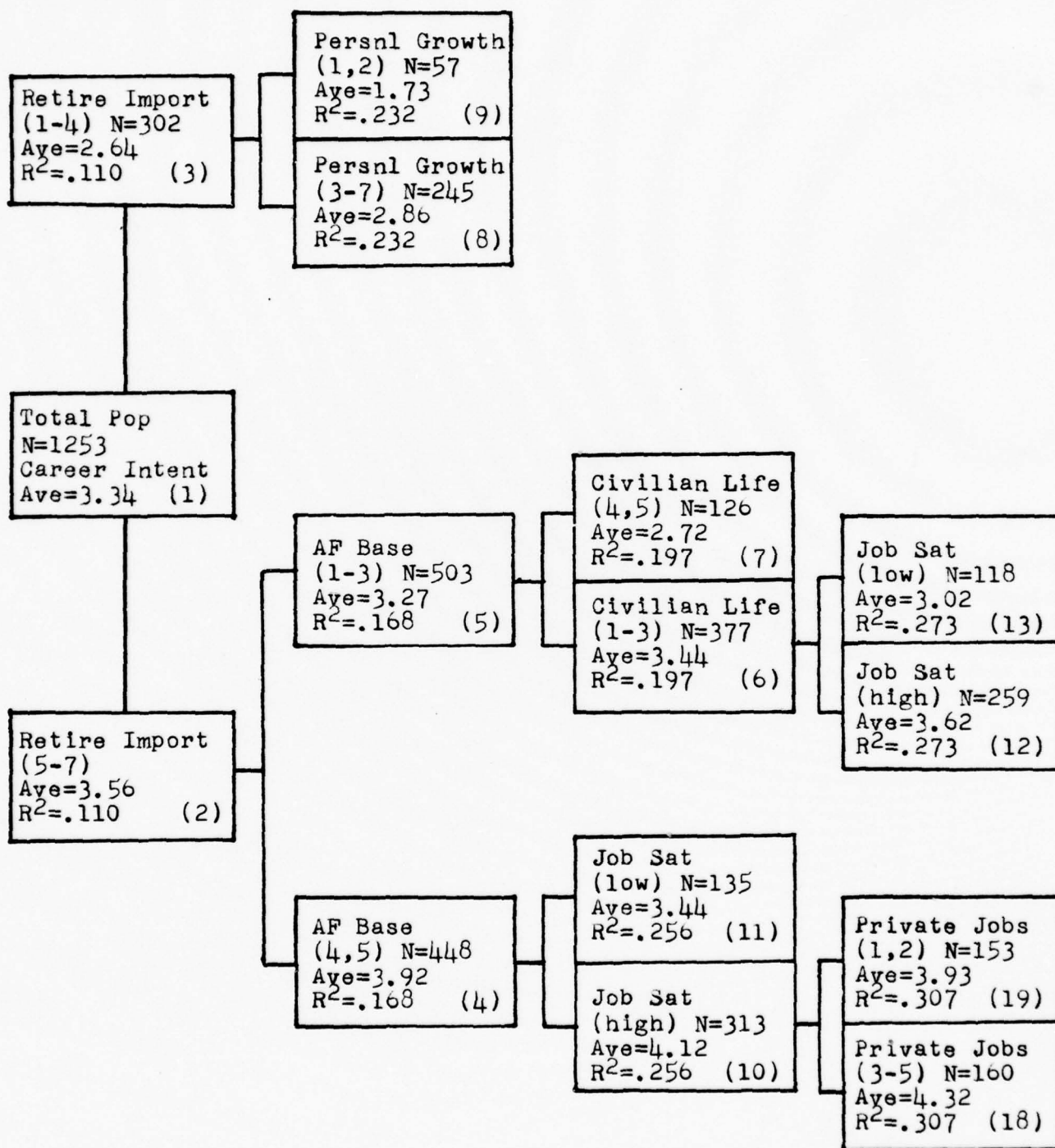


Figure 3. Career Intent AID Tree (First Term Officer Personnel)

(11), (13), and (19) contain those personnel who have relatively lower career intent. An analysis of these subgroups shows that first term officer personnel with relatively low career intent can be described by the following:

- View the retirement benefit as relatively unimportant
- View an Air Force base as an undesirable place to live
- Believe that they can get more of an even break in civilian life than in the Air Force
- Are relatively dissatisfied with their personal growth
- Have lower job satisfaction
- Believe that it would not be very difficult to get a comparable job in private industry

Enlisted vs Officer. There is very little difference between the variables used to describe enlisted personnel and officer personnel career intent. The only difference is that one additional variable, private job availability (question 30), is used to describe officers and this variable is not very powerful.

Non-Rated Officer AID Analysis. The AID tree for non-rated officer personnel is presented in figure 4, p.40.

As can be seen, the AID tree is fairly simple with only four different variables being used. The first split was made using the retirement benefit question, which explained 14.5 percent of the career intent variance. Subgroups (3), (5), (7), (9), and (13) contain those personnel who have relatively low career intent. An analysis of these subgroups shows that first term non-rated officer personnel with relatively low career intent can be described by the

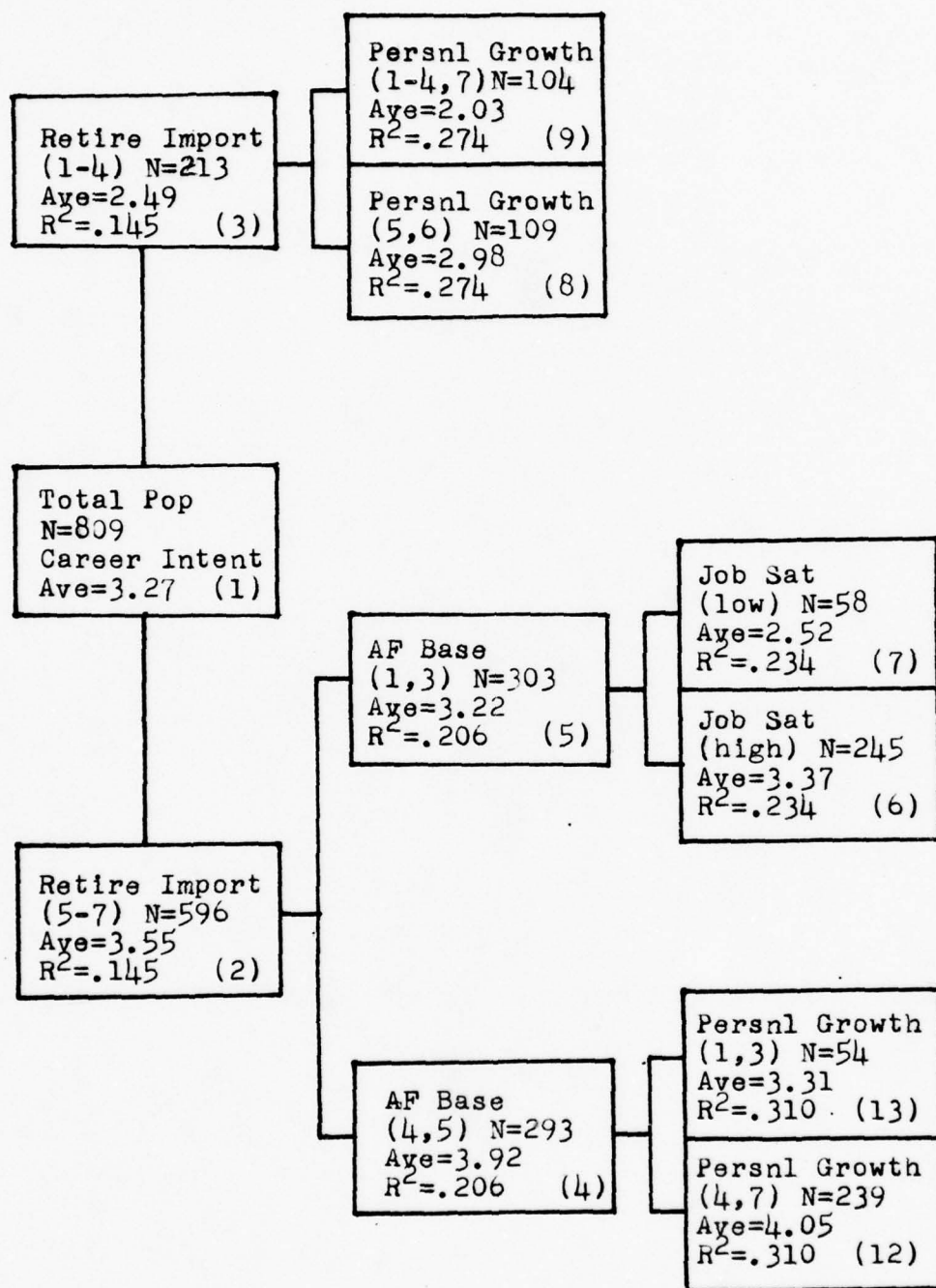


Figure 4. Career Intent AID Tree (First Term Non-Rated Officers)

following statements:

- View the retirement benefit as relatively unimportant
- View an Air Force base as an undesirable place to live
- Have lower job satisfaction
- Generally have lower personal growth satisfaction

Rated Officer AID Analysis. The AID tree for rated officers is shown in figure 5, p.42.

Unlike the AID analyses for all the other subgroups, the first split was made using the Hoppock job satisfaction measure. This variable was able to explain 14.4 percent of the career intent variation of first term rated officers.

An inspection of figures 1-5 and Table III shows that there are three variables used in the rated AID analysis which were not used in any of the other AID analyses. This fact indicates that the rated officer group is quite different from the other groups. Two of these new variables are importance of benefit questions (41 and 46). One of these benefit variables (question 46-importance of recreation facilities) is uninterpretable even though it increases the R^2 value by 4.4 percent and is statistically significant.

Inspection of subgroups (12) and (13) in figure 5, p.42, reveals an interesting situation. Both subgroups exhibit relatively high career intent and high job satisfaction. Subgroup (13) has higher job satisfaction than subgroup (12) and yet has a lower career intent average. This phenomenon could be due to the fact that those first term rated personnel who are extremely satisfied with their jobs

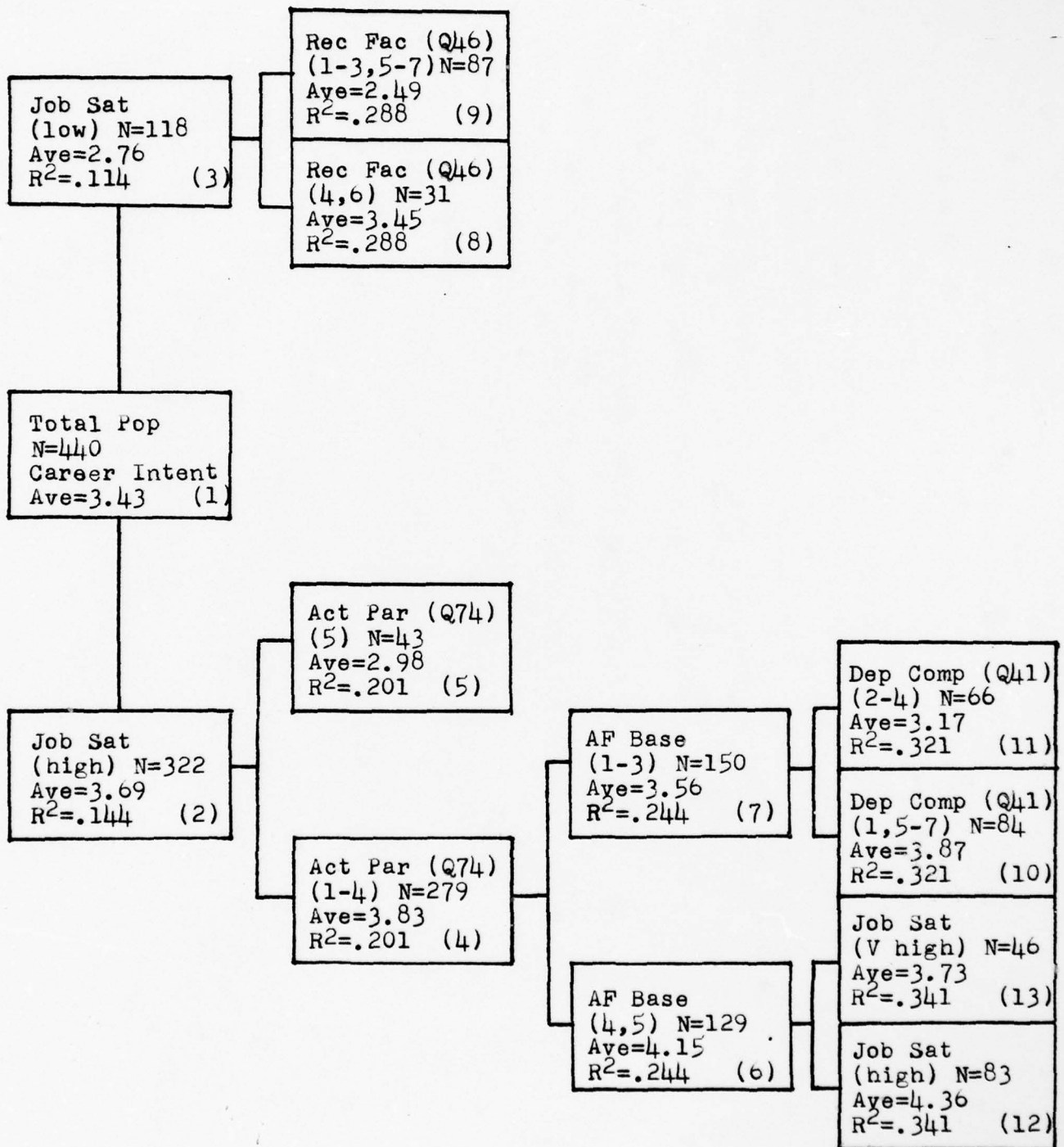


Figure 5 . Career Intent AID tree (First Term Rated Officers)

Table III.
Career Intent
AID Variables
(First Term Groups)

Question Number	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
30			X		
41					X
42	X	X	X	X	
46					X
50	X	X	X	X	X
74					X
90	X				
138		X	X		
144		X	X	X	
175	X	X	X	X	X

Note: "X" indicates which variable was in each AID tree.

<u>Question Number</u>	<u>AID Tree Abbreviation</u>	<u>Subject</u>
30	Private Jobs	Private industry job opportunity
41	Dep Comp	Dependents indemnity importance
42	Retire Import	Retirement importance
46	Rec Fac	Recreation facilities importance
50	AF Base	Desirability of living on an AF base
74	Act Par	Requirement to participate in too many non-job related activities
90	Ldrshp Qual	Quality of AF leadership
138	Civilian Life	Individual can get better break in civilian life
144	Persnl Growth	Personal growth satisfaction
175	Job Sat	Job Satisfaction

see themselves as not being able to remain in those same jobs the rest of their careers due to rated supplement tours and the necessity to leave the cockpit in order to remain competitive for promotion.

Subgroups (3), (5), (7), and (11) can be used to describe those first term rated officers who have relatively low career intent. These officers can be described by:

- Lower job satisfaction
- Believe that they are required to participate in too many activities that are not job related
- View an Air Force base as an undesirable place to live
- View the dependents indemnity compensation benefit as relatively less important

AID Conclusion. AID analysis indicates that career intent is mainly a function of three factors. The strongest predictor was the importance of the retirement benefit (question 42). The second most important predictor appeared to be the desirability of living on an Air Force base. The third predictor was the Hoppock job satisfaction measure.

First term Air Force personnel who have relatively low career intent can be generally described by the following:

- They view the retirement benefit as relatively unimportant
- They view an Air Force base as an undesirable place to live
- They have relatively lower job satisfaction

In addition to the above three main factors such things as personal growth satisfaction, opinion of the quality of

Air Force leadership, civilian job opportunities, better break in civilian life, and various Air Force benefits also had predictive power. Of the above additional factors only personal growth satisfaction and believing that an individual can get more of an even break in civilian life were significant in more than one AID analysis.

It was also found that the predictors of rated officer career intent appear to be quite different from all the other groups. Whether this difference is due to idiosyncrasies of rated officers or is due to the survey sample can only be speculated.

Regression Results

The regression results for each group are presented in Tables IV-VIII. Each table presents the regression coefficients, Beta weights, multiple R, Rsquare, R square change, and significance of the variables in the regression equation. A summary of the results is presented in Table IX, p.55.

Question 42, the importance of retirement, is in every equation. This variable was either the second or third variable to be entered into the equations. Question 50, the desirability of living on an Air Force base, is also in every equation.

First Term Regression. The regression equation for first term personnel contains four variables. The first

Table IV.
Career Intent Regression
(All First Term Personnel)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
50	.257	.249	.413	.171	.171	.000
42	.144	.267	.517	.268	.097	.000
175	.055	.217	.559	.313	.045	.000
30	.140	.146	.576	.332	.019	.000
Constant	not significant					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
50	Air Force Base	1 - 5
42	Retirement Importance	1 - 7
175	Job Satisfaction	4 - 28
30	Private Industry Job Opportunity	1 - 5

$$\text{Career Intent} = .257(Q50) + .144(Q42) + .055(Q175) + .14(Q30)$$

variable to be entered into the equation is question 50, an Air Force base is a desirable place to live. The other variables are: question 42 (importance of retirement), question 175 (job satisfaction), and question 30 (the difficulty of obtaining a comparable job in private industry). The first term individual with relatively low career intent can be characterized by:

- Views an Air Force base as an undesirable place to live
- Views the retirement benefit as relatively unimportant
- Has lower job satisfaction
- Believes that it would not be very difficult to get a comparable job in private industry

Enlisted Regression. The regression equation for first term enlisted personnel contains the same variables as the equation for all first term personnel. This is not surprising because the weighted sample contains about 90 percent enlisted personnel.

The regression equation for first term enlisted personnel is presented in Table V, p.48.

Officer Regression. The regression equation for first term officer personnel contains four variables (see Table VI, p.49). The first variable to be entered into the equation was question 50, the desirability of living on base. The second variable to be entered into the equation was question 144, the QOAFLI of personal growth satisfaction. The other two variables in the equation are questions 42 (importance of retirement) and 90 (opinion of the quality of Air Force leadership). The first term officer with

Table V.
Career Intent Regression
(First Term Enlisted)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
50	.248	.242	.414	.172	.172	.000
42	.146	.279	.528	.279	.107	.000
175	.052	.211	.568	.322	.044	.000
30	.157	.166	.588	.346	.024	.000
Constant	.051					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
50	Air Force Base	1 - 5
42	Retirement Importance	1 - 7
175	Job Satisfaction	4 - 28
30	Private Industry Job Opportunity	1 - 5

$$\text{Career Intent} = .051 + .248(Q50) + .146(Q42) + .052(Q175) + .157(Q30)$$

Table VI.
Career Intent Regression
(First Term Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
50	.224	.228	.337	.113	.113	.000
144	.158	.199	.429	.184	.071	.000
42	.144	.236	.491	.241	.057	.000
90	-.207	-.154	.510	.260	.020	.000
Constant	1.77					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
50	Air Force Base	1 - 5
144	Personal Growth Satisfaction	1 - 7
42	Retirement Importance	1 - 7
90	Quality of AF Leadership	1 - 5

$$\text{Career Intent} = 1.77 + .224(Q50) + .158(Q144) + .144(Q42) - .207(Q90)$$

relatively low career intent can be characterized by:

- Views an Air Force base as an undesirable place to live
- Has relatively low personal growth satisfaction
- Views the retirement benefit as relatively unimportant
- Views the quality of Air Force leadership to be below average

Enlisted vs Officer. As can be seen in Table IX, p.55, there is a difference between the enlisted and officer regression equations. The two equations have only two variables in common, questions 42 and 50.

Question 30 is in the enlisted equation but not in the officer equation, indicating that officers are not as concerned about their ability to obtain a comparable job in private industry as are enlisted personnel. Perhaps this is because all first term officers have at least an undergraduate degree and their employment opportunities are much greater than those of the enlisted person who is usually competent in one or two specialized areas for which there may not be an equivalent civilian job.

The officer equation does not contain question 175, job satisfaction, whereas the enlisted equation does. This could be due to the fact that the mean job satisfaction of the officer group is higher than that for the enlisted group and the variability of officer job satisfaction is not as great as that for enlisted. The job satisfaction variable in the enlisted equation appears to be replaced by question 144, personal growth satisfaction, in the officer

equation. This substitution seems to be plausible in that one internal factor, job satisfaction, is replaced by the internal factor of personal growth satisfaction.

Non-Rated Officer Regression. As can be seen in Table IX, p.55, the regression equation for the non-rated group contains three of the four variables contained in the officer regression equation. The non-rated equation, Table VII, p.52, contains question 30, the difficulty of obtaining a comparable job in private industry, in place of question 90, opinion of the quality of Air Force leadership, in the officer equation.

The first term non-rated officer with low career intent can be described as a person who:

- Views the retirement benefit as relatively unimportant
- Views an Air Force base as an undesirable place to live
- Has relatively low personal growth satisfaction
- Believes that it would not be very difficult to get a comparable job in private industry

Rated Officer Regression. Inspection of Table VIII, p.53, shows that the rated officer equation contains five variables: question 42, importance of retirement benefit, question 50, desirability of living on base, question 144, personal growth satisfaction, and question 175, job satisfaction. The first term rated officer with low career intent can be described as a person who:

- Has relatively low job satisfaction
- Views an Air Force base as an undesirable place to live
- Has relatively low personal growth satisfaction
- Views the retirement benefit as relatively unimportant

Table VII.
Career Intent Regression
(Non-Rated Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
42	.190	.301	.386	.149	.149	.000
50	.288	.271	.507	.257	.108	.000
144	.164	.204	.553	.305	.048	.000
30	.167	.170	.557	.333	.027	.000
Constant	.171					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
42	Retirement Importance	1 - 7
50	Air Force Base	1 - 5
144	Personal Growth Satisfaction	1 - 7
30	Private Industry Job Opportunity	1 - 5

$$\text{Career Intent} = .171 + .190(Q_{42}) + .288(Q_{50}) + .164(Q_{144}) + .167(Q_{30})$$

Table VIII.
Career Intent Regression
(Rated Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
175	.050	.177	.372	.138	.138	.000
74	-.210	-.217	.436	.190	.051	.000
42	.127	.193	.485	.235	.046	.000
50	.158	.167	.510	.260	.025	.000
144	.130	.164	.530	.281	.021	.000
Constant	1.444					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
175	Job Satisfaction	4 - 28
74	Required Activities Participation	1 - 5
42	Retirement Importance	1 - 7
50	Air Force Base	1 - 5
144	Personal Growth Satisfaction	1 - 7

$$\text{Career Intent} = 1.444 + .050(Q175) - .210(Q74) + .127(Q42) + .158(Q50) + .130(Q144)$$

-Believes that he is required to participate in too many activities that are not job related

Rated vs Non-Rated. Inspection of Table IX, p.55, reveals that there is little difference between the rated and non-rated equations. There are three variables that are common to each equation. The biggest difference between the two equations is that the rated equation contains the job satisfaction variable, whereas the non-rated equation does not.

Regression Conclusion. The variables that entered into the five regression equations can be roughly divided into two categories. One category consists of extrinsic factors or benefits and the other consists of intrinsic factors. The intrinsic factors include job satisfaction, personal growth, and the perceived quality of Air Force leadership. The extrinsic factors or benefits include perceived outside job opportunities, retirement benefit, and the desirability of living on base. By dividing the variables into these two categories, one can hypothesize that career intent is a function of both internal and external factors.

The main finding of this regression analysis is that career intent for first term Air Force personnel is mainly related to two factors. These two factors are the retirement benefit and the desirability of living on base. These findings are significant in that, as far as this writer is

Table IX.
Career Intent Regression Equation
Variables for Each Group
(First Term)

Question Number	First Term Personnel	Enlisted Personnel	Officers Personnel	Non-Rated Officers	Rated Officers
30	X	X		X	
42	X	X	X	X	X
50	X	X	X	X	X
74					X
90			X		
144			X	X	X
175	X	X			X

Note: "X" indicates which variable was in each regression equation

<u>Question Number</u>	<u>Subject</u>
30	Private Industry Job Opportunity
42	Retirement Importance
50	Desirability of living on an AF base
74	Required Activities Participation
90	Quality of AF leadership
144	Personal Growth Satisfaction
175	Job Satisfaction

concerned, the career intent of first term personnel has not been previously linked with these two factors.

Other factors, though to a lesser extent, found to be related to career intent were the factors concerning the perceived difficulty of obtaining a comparable civilian job, job satisfaction, and personal growth satisfaction.

AID and Regression Summary

The career intent AID and regression analyses presented in this chapter have produced markedly similar results. The two analysis techniques have indicated that there are four main factors associated with the career intent of first term Air Force personnel. These four main factors were:

- Importance of the retirement benefit
- The desirability of living on an Air Force base
- Job satisfaction
- Personal growth satisfaction

There were several other factors found to be associated with first term personnel career intent, though to a lesser extent.

For the interested reader, a correlation matrix, for each group, containing the criterion and predictor variables discussed in this chapter can be found in Tables XXV-XXIX, Appendix C. A breakdown of the responses for questions 42 and 50 can be found in Tables XXXV and XXXVI, Appendix D.

A more complete and comprehensive discussion of the findings in this chapter is presented in chapter VI.

V. JOB SATISFACTION ANALYSIS RESULTS

Introduction

This chapter presents the results of the job satisfaction analysis. Tables XXIII and XXIV, Appendix B, show which questions were used in the final AID and regression analyses. The AID results are presented in the first part of the chapter and the regression results are presented in the latter half.

Table XI, p.59, presents the average job satisfaction broken down by group, rank, and years of service.

The analysis results presented in this chapter are presented in a manner such that low job satisfaction is described. Generally, the results can be reversed to describe first term personnel with high job satisfaction. For instance, if low job satisfaction is described by low job challenge, then high job satisfaction would be described by high job challenge.

The Job Satisfaction Measure

The job satisfaction measure used in this report was obtained by linearly combining the responses to questions 57, 58, 59, and 60. These four questions are a modification of Hoppock's four part job satisfaction blank (Hoppock, 1935). The job satisfaction score has a possible low of 4 and a possible high of 28.

Table X.
Factor Analysis Results
(First Term Groups)

<u>Eigenvalues</u>					
<u>Factor</u>	<u>First Term Personnel</u>	<u>Enlisted Personnel</u>	<u>Officer Personnel</u>	<u>Non-Rated Officers</u>	<u>Rated Officers</u>
1	2.831	2.772	2.899	2.930	2.792
2	.488	.496	.498	.493	.513
3	.413	.445	.357	.344	.420
4	.268	.287	.245	.234	.275

Factor Matrix Using Principal Factor

<u>Question Number</u>	<u>First Term Personnel</u>	<u>Enlisted Personnel</u>	<u>Officer Personnel</u>	<u>Non-Rated Officers</u>	<u>Rated Officers</u>
57	.835	.817	.862	.869	.826
58	.898	.890	.907	.911	.893
59	.805	.807	.797	.796	.810
60	.825	.814	.836	.844	.811

Factor Score Coefficients: First Factor

<u>Question Number</u>	<u>First Term Personnel</u>	<u>Enlisted Personnel</u>	<u>Officer Personnel</u>	<u>Non-Rated Officers</u>	<u>Rated Officers</u>
57	.295	.295	.297	.296	.296
58	.317	.321	.313	.311	.320
59	.284	.291	.275	.272	.290
60	.291	.294	.288	.288	.290

Table XI.
Average Job Satisfaction
(First Term)

	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
Group	17.05	16.91	18.42	18.36	18.57
CAPT	18.49		18.49	18.81	18.30
1 LT	17.97		17.97	17.51	18.63
2 LT	19.13		19.14	18.88	20.77
SSGT	16.41	16.41			
SGT	16.76	16.76			
SRA	15.59	15.59			
A1C	17.42	17.42			
AMN	17.42	17.42			
AB	16.06	16.06			
Years Service					
0	17.04	16.87	19.61	19.50	20.65
1	17.67	17.64	18.49	18.09	21.05
2	16.60	16.43	18.18	18.06	18.51
3	16.73	16.56	17.90	17.50	18.76
4	16.82	16.34	18.88	18.45	19.28
5	18.41		18.41		18.41
6	16.85		16.85		16.85

Factor analysis using these four questions was performed for each group in order to confirm that they were indeed measuring one factor. An examination of the factor score coefficients confirmed the validity of the assumption that these four questions could be linearly combined to measure one factor. The results of the factor analysis are presented in Table X, p.58.

AID Results

The AID trees for each group are presented in figures 6-10. Each box in the AID tree represents a subgroup of the population being studied. Shown in the box for each subgroup is the average job satisfaction, the number of persons in the subgroup, a brief description of the predictor variable, the cumulative R squared value, and the group number (lower right hand corner). The response codes for the predictor variable are shown in parentheses below the predictor variable name. The response codes are interpreted as follows: 1=A, 2=B, 3=C, etc. where A, B, C, are the responses given by that subgroup to the survey question (predictor variable). A summary of the AID results is presented in Table XII, p. 69.

Inspection of Table XII reveals the fact that there were two questions which emerged as significant predictors in every job satisfaction AID analysis. The first of these is question 68, job challenge. The second is question 69, the degree to which the present job makes use of the

individual's training and ability.

First Term AID Analysis. The AID tree for first term personnel is shown in figure 6, p.62. Inspection of the tree shows that job challenge was used as the predictor variable in three group splits and the use of training and ability variable was used in two splits.

The first split was made using job challenge which was able to explain 31 percent of the variation in job satisfaction. Subgroups (2), (4), (6), (8), (10), (12), (14), and (16) contain those personnel who have relatively low job satisfaction. An analysis of these subgroups shows that first term personnel with relatively lower job satisfaction can be described by the following:

- Low job challenge
- Relatively low present use of training and ability
- Lower career intent
- Feel that their present job is not preparing them to assume future positions of greater responsibility
- Relatively low Leadership/Supervision satisfaction

It should be noted that the job challenge and the use of training and ability variables alone are able to explain 46 percent of the variation in job satisfaction of first term personnel.

Enlisted AID Analysis. The AID tree for first term enlisted personnel is presented in figure 7, p.63. The enlisted AID tree is very similar to the tree for first term personnel. The first five splits in each tree utilize the same variables.

Subgroups (2), (4), (6), (8), (10), (12), and (14)

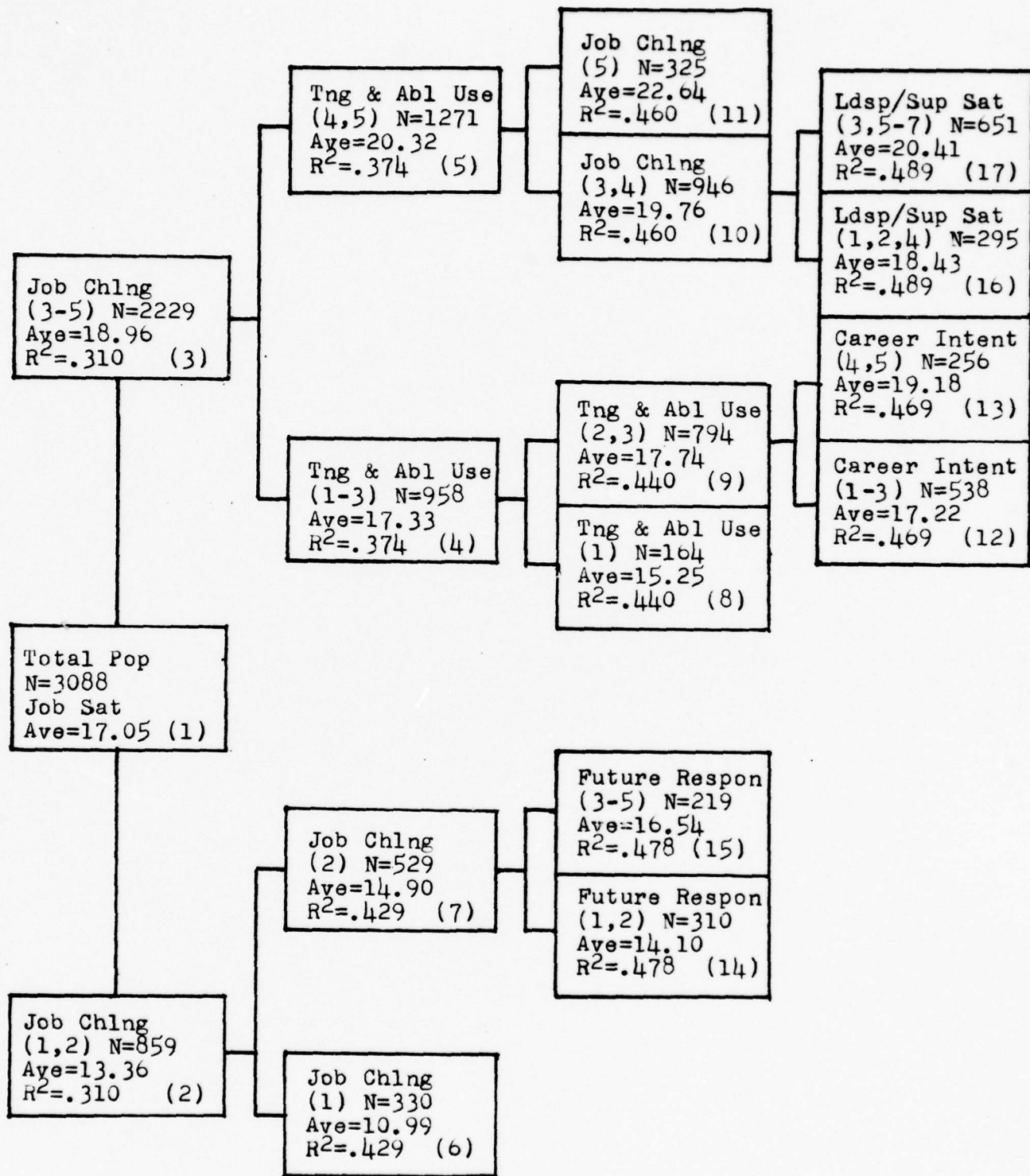


Figure 6. Job Satisfaction AID Tree
(All First Term Personnel)

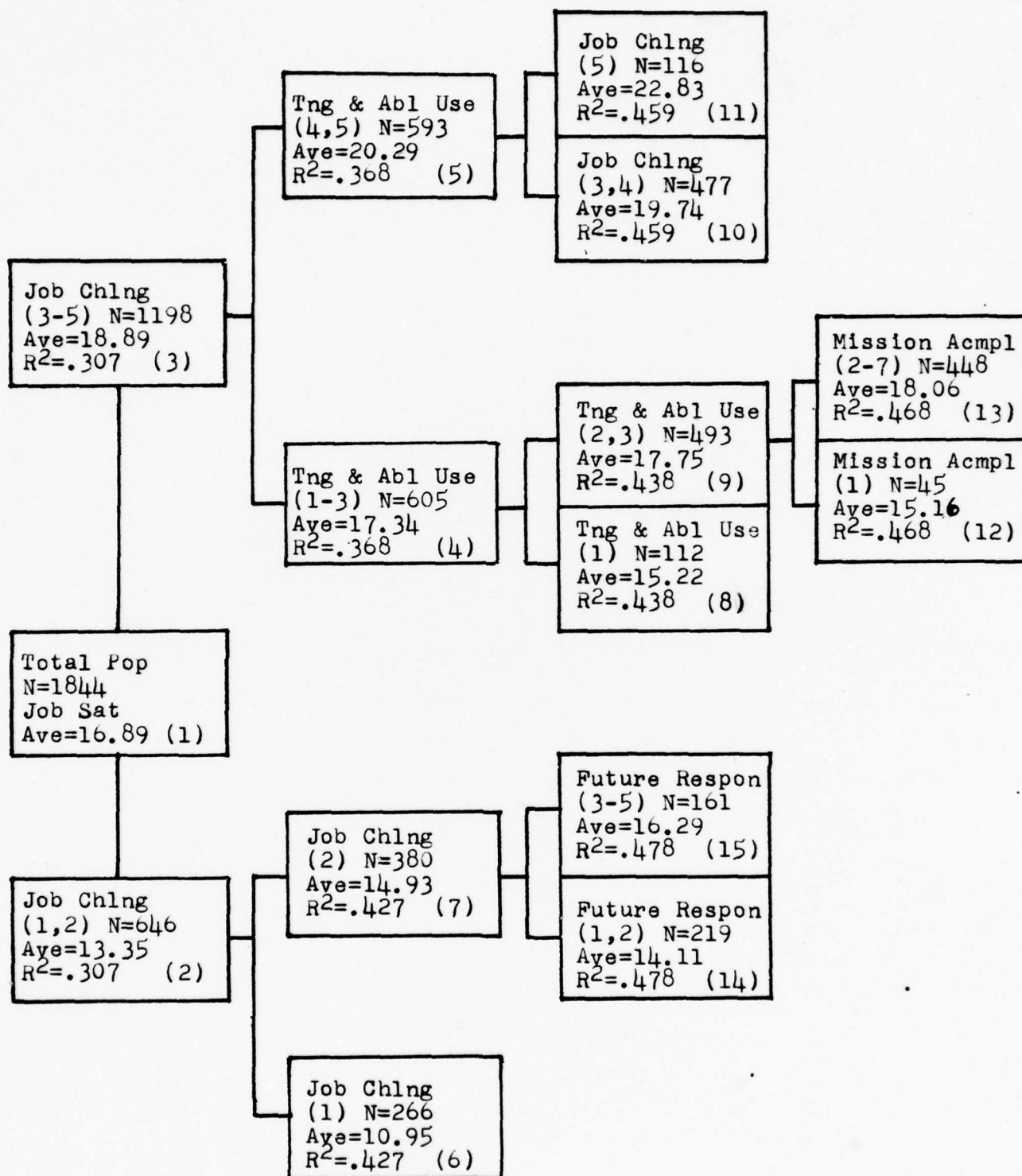


Figure 7 . Job Satisfaction AID Tree (First Term Enlisted Personnel)

contain those personnel who have relatively lower job satisfaction. These first term enlisted personnel can be described by the following:

- Low job challenge
- Relatively low present use of training and ability
- Strong belief that mission accomplishment should not be given more interest than personal concerns
- Feel that their present job is not preparing them to assume future positions of greater responsibility

Officer AID Analysis. The AID tree for officer personnel is presented in figure 8, p.65. The first split was made using the use of training and ability variable.

Subgroups (2), (4), (6), (10), and (12) contain those personnel who have relatively low job satisfaction. An analysis of these subgroups indicates that these first term officer personnel can be described by the following:

- Relatively low present use of training and ability
- Low job challenge
- Relatively less job freedom
- Highly dissatisfied with their personal growth

Enlisted vs Officer. A comparison of figures 7 and 8 shows that the primary descriptors of job satisfaction for both officers and enlisted personnel are the same factors of job challenge and use of training and ability. The main difference between the enlisted and officer personnel AID trees is that the enlisted AID tree only used two different variables for the first five splits, whereas five different variables were used for officers. This observation seems to say that officer job satisfaction is more complicated

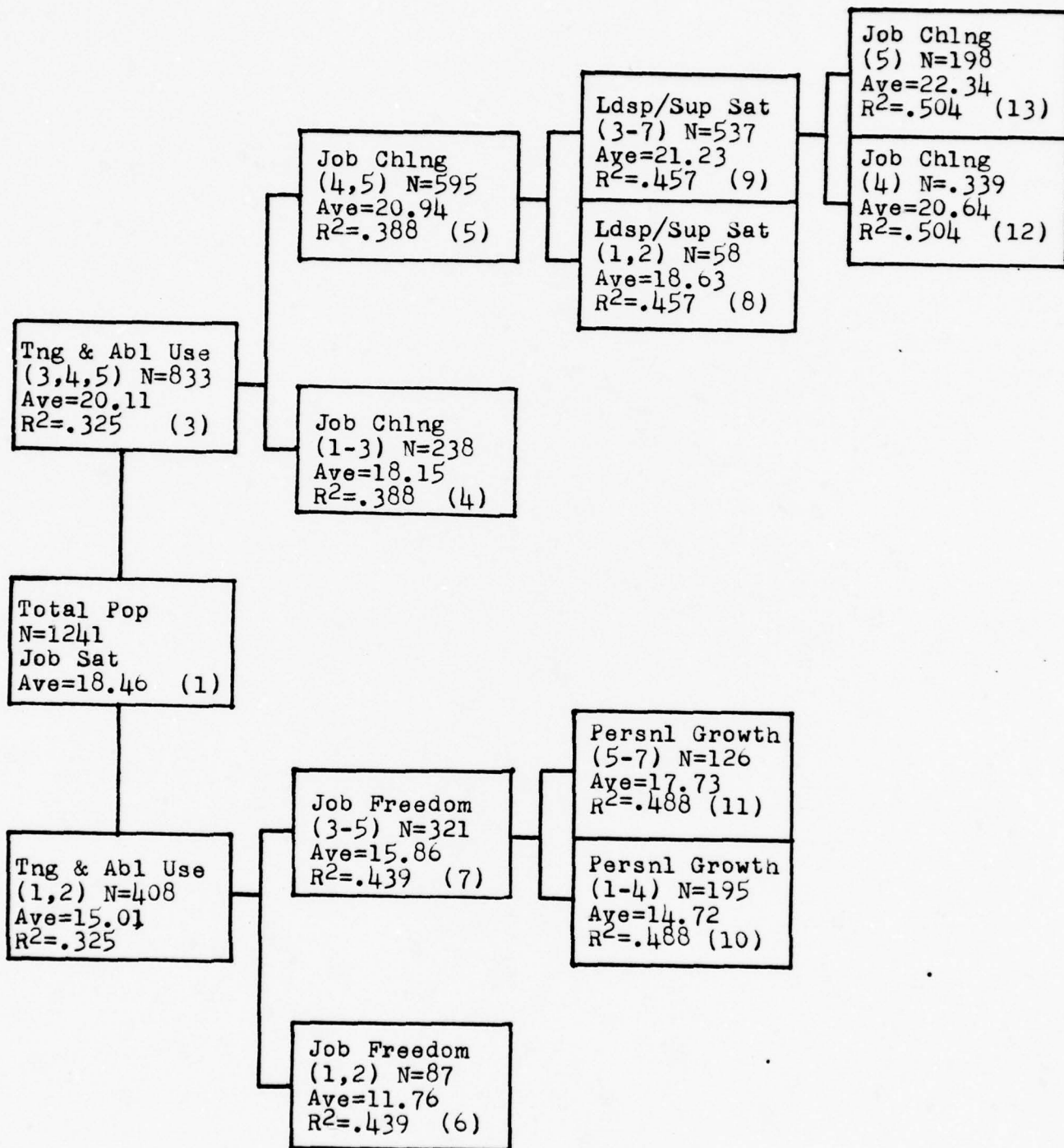


Figure 8 . Job Satisfaction AID Tree (First Term Officer Personnel)

and harder to define than enlisted job satisfaction.

Non-Rated Officer AID Analysis. The AID tree for non-rated officer personnel is shown in figure 9, p.67. The same variables used to describe the officer population are used to describe non-rated officers. Hence, the description used for first term officers also applies to first term non-rated officers.

Rated Officer AID Analysis. The AID tree for rated officers is shown in figure 10, p.68. The first split was made using job challenge as the predictor.

Subgroups (2), (4), (6), (8), (10), and (12) contain those personnel who have relatively lower job satisfaction. An analysis of these subgroups indicates that first term rated officer personnel with relatively low job satisfaction can be described by the following:

- Low job challenge
- Relatively low present use of training and ability
- Low personal standing satisfaction
- Highly dissatisfied with their personal growth
- A feeling that individuals in the group do not encourage each other to work as a team

Non-Rated vs Rated. An analysis of Table XII, p.69, shows that three variables emerged in both the rated and non-rated AID analyses. This seems to say that the determinants of job satisfaction for non-rated and rated officers are close to being the same.

AID Conclusion. AID analysis indicates that job satisfaction for first term personnel is primarily a function

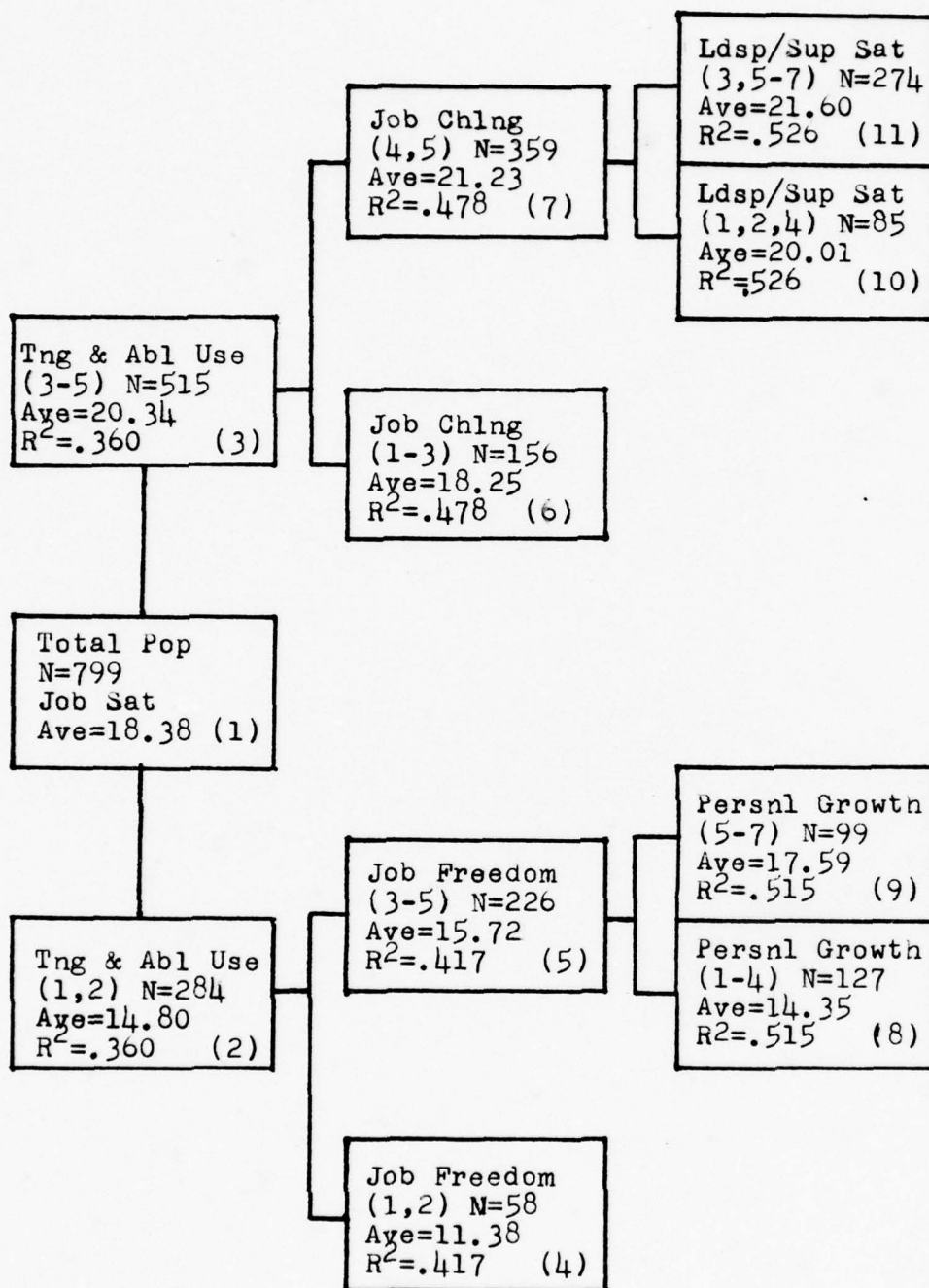


Figure 9 . Job Satisfaction AID Tree (First Term Non-Rated Officers)

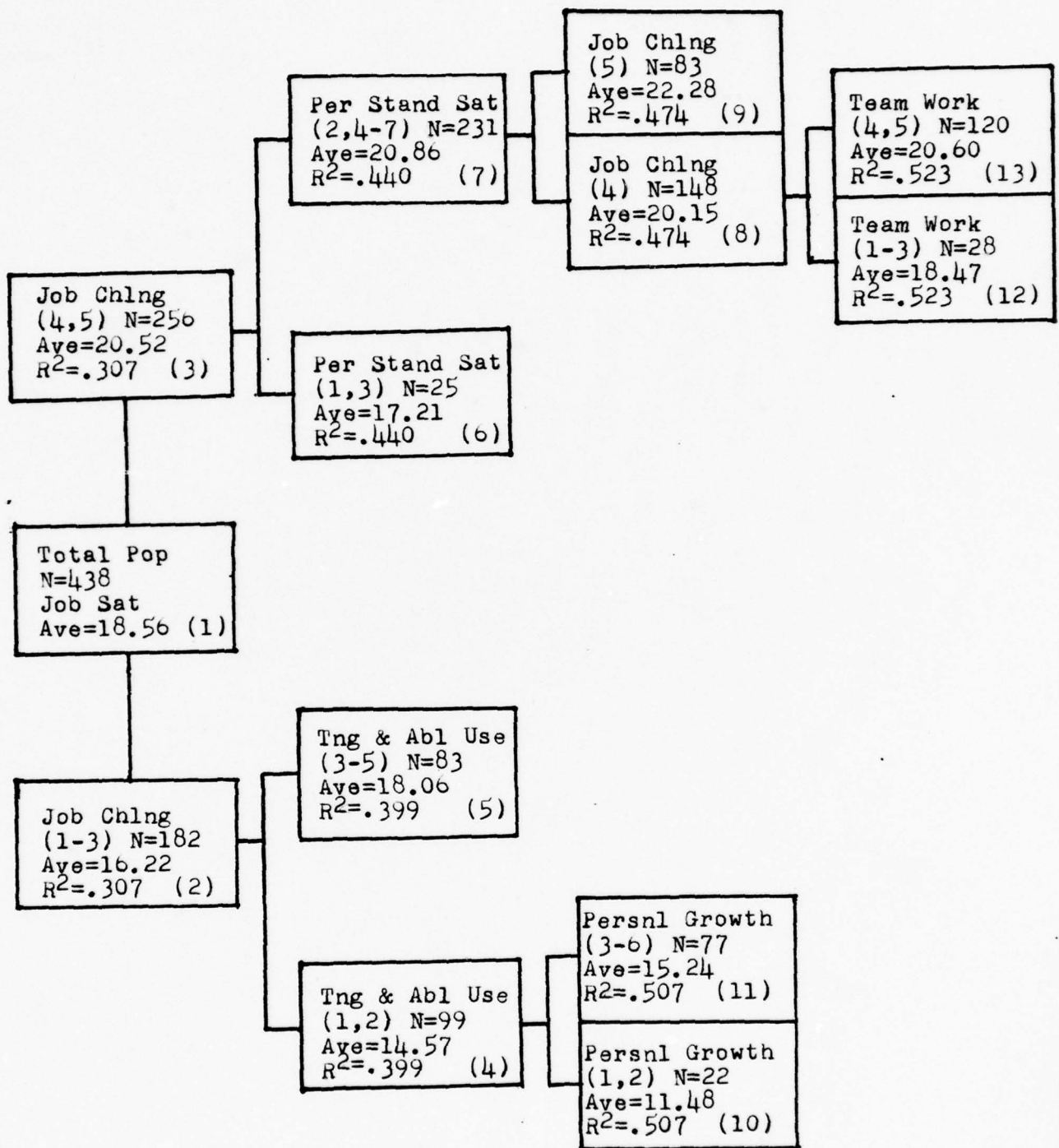


Figure 10. Job Satisfaction AID Tree (First Term Rated Officers)

Table XII.

Job Satisfaction
AID Variables
(First Term Groups)

Question Number	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
14	X				
68	X	X	X	X	X
69	X	X	X	X	X
70	X	X			
75		X			
88	X		X	X	
119					X
135			X	X	
144			X	X	X
153					X

Note: "X" indicates which variable was in each AID tree.

<u>Question Number</u>	<u>AID Tree Abbreviation</u>	<u>Subject</u>
14	Career Intent	Career Intent
68	Job Chlng	Job Challenge
69	Tng & Abl Use	Use of Training and Ability
70	Future Respon	Preparation for future responsibilities
75	Mission Acmpl	Mission accomplishment concern
88	Ldsp/Sup Sat	Leadership/supervision satisfaction
119	Team Work	Work group encouragement
135	Job Freedom	Job Freedom
144	Persnl Growth	Personal growth satisfaction
153	Per Stand Sat	Personal standing satisfaction

of job challenge and the present use of an individual's training and ability. Such other factors as preparation for increased future responsibility, personal growth satisfaction, Leadership/Supervision satisfaction, personal standing satisfaction, and job freedom are also determinants of job satisfaction though to a lesser extent. The determinants of job satisfaction seem to be either job related factors or intrinsic factors.

One notable observation of this AID analysis is that none of the demographic variables or traditional factors such as pay and fringe benefits emerged as predictors of job satisfaction for first term personnel.

Regression Results

The regression results for each group are presented in Tables XIII - XVII. Each table presents the regression coefficients, Beta weights, multiple R, R square, R square change, and statistical significance of the variables in the regression equation. A summary of the results is presented in Table XVIII, p. 80.

An inspection of Table XVIII reveals the fact that there are two variables which are common to each of the regression equations. The first of these common variables is question 68, which is the job challenge question. In the regression of each group, except the non-rated group, this variable was the first one to be brought into the equation. The lowest R squared for this variable was .401.

This says that at least 40 percent of the variance in job satisfaction is explained by the single variable of job challenge.

The second variable that is common to all the regression equations is question 69, which is the use of training and ability question. In all groups, except for the rated group, this variable was either the first or second one to be entered into the regression equation. In those cases where questions 68 and 69 were the first two variables in the regression equation, the R squared values ranged from .470 to .504. This means that the two questions together are able to explain better than 47 percent of the variation in job satisfaction.

First Term Regression. The regression equation for all first term personnel contains four variables. In addition to questions 68 and 69 which were discussed above, the first term equation contains questions 70, preparation for future responsibility, and 153, personal standing satisfaction. These four variables together explain 52.5 percent of the job satisfaction variation of first term Air Force personnel. The regression equation indicates that first term personnel with low job satisfaction can be described by the following:

- Low job challenge
- Relatively low present use of training and ability
- Feel that their present job is not preparing them to assume future positions of greater responsibility
- Low personal standing satisfaction

Table XIII.
Job Satisfaction Regression
 (All First Term Personnel)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>AR²</u>	<u>Significance in Final Equation</u>
68	1.52	.372	.642	.412	.412	.000
69	.859	.228	.693	.480	.068	.000
70	.635	.182	.711	.506	.026	.000
153	.433	.146	.725	.525	.019	.000
Constant	6.31					.000

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
68	Job Challenge	1 - 5
69	Use of Training and Ability	1 - 5
70	Preparation for Future Responsibility	1 - 5
153	Personal Standing Satisfaction	1 - 7

$$\text{Job Satisfaction} = 6.31 + 1.52(68) + .859(69) + .635(70) + .433(153)$$

Enlisted Regression. The regression equation for first term enlisted personnel is shown in Table XIV, p.74. The enlisted equation is nearly identical with the first term equation. Thus, the results for first term personnel explained above also apply to first term enlisted personnel. This was to be expected because of the fact that approximately 60 percent of the sample population is composed of enlisted personnel and the weighted percentage is approximately 90 percent.

Officer Regression. The regression equation for first term officers contains four variables which are questions 68, job challenge, 69, use of training and ability, 88, the QOAFLI of Leadership/Supervision satisfaction, and 14, career intent. The regression equation is presented in Table XV, p.75. First term officers with low job satisfaction can be described as individuals who:

- Have low job challenge
- Have relatively low present use of training and ability
- Feel less satisfied with the Leadership/Supervision aspects
- Have low career intent

Enlisted vs Officer. Inspection of Table XVIII, p.80, reveals the fact that the enlisted and officer regression equations have only two variables in common which are questions 68, job challenge, and 69, use of training and ability. It is interesting to note that job satisfaction for officers is dependent on career intent, whereas, job

Table XIV.
Job Satisfaction Regression
(First Term Enlisted)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>AR²</u>	<u>Significance in Final Equation</u>
68	1.57	.380	.640	.409	.409	.000
69	.85	.223	.691	.477	.068	.000
70	.634	.181	.709	.502	.025	.000
153	.431	.146	.722	.521	.019	.000
Constant	6.21					.000

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
68	Job Challenge	1 - 5
69	Use of Training and Ability	1 - 5
70	Preparation for Future Responsibility	1 - 5
153	Personal Standing Satisfaction	1 - 7

$$\text{Job Satisfaction} = 6.21 + 1.57(Q68) + .85(Q69) + .634(Q70) + .431(Q153)$$

Table XV.
Job Satisfaction Regression
(First Term Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
68	1.38	.352	.634	.401	.401	.000
69	1.00	.298	.686	.470	.069	.000
88	.495	.202	.717	.514	.044	.000
14	.600	.167	.735	.540	.026	.000
Constant	6.23					.000

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
68	Job Challenge	1 - 5
69	Use of Training and Ability	1 - 5
88	Leadership/Supervision	1 - 7
14	Career Intent	1 - 5

$$\text{Job Satisfaction} = 6.23 + 1.38(Q68) + 1.0(Q69) + .495(Q88) + .60(Q14)$$

satisfaction for enlisted personnel is not dependent on career intent.

Non-Rated Officer Regression. The regression equation for non-rated officer personnel is shown in Table XVI, p.77. As can be seen the equation contains four variables. Only two of these variables are also contained in the officer equation. An inspection of Table XVIII, p.80, reveals the fact that the non-rated equation contains two variables that are not in any of the other regression equations. Whether this fact suggests that job satisfaction for first term non-rated officers is significantly different than the job satisfaction of all other first term Air Force personnel can only be conjecture at this point.

According to the regression equation, first term non-rated officers with low job satisfaction can be described by the following:

- Low job challenge
- Relatively low present use of training and ability
- Dissatisfaction with their personal growth
- Relatively less job freedom

Rated Officer Regression. The regression equation for first term rated officers is shown in Table XVII, p.78. The equation for rated officers is similar to the officer equation with the only exception being that the QOAFLI of Leadership/Supervision (question 88) in the officer equation is replaced by the QOAFLI of personal standing satisfaction (question 153). It is interesting to note that this

Table XVI.
Job Satisfaction Regression
(First Term Non-Rated Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>AR²</u>	<u>Significance in Final Equation</u>
69	1.13	.319	.654	.428	.428	.000
68	1.20	.291	.710	.504	.076	.000
144	.57	.197	.738	.545	.041	.000
135	.82	.175	.756	.571	.026	.000
Constant	5.02					.000

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
69	Use of Training and Ability	1 - 5
68	Job Challenge	1 - 5
144	Personal Growth Satisfaction	1 - 7
135	Job Freedom	1 - 5

$$\text{Job Satisfaction} = 5.02 + 1.13(Q_{69}) + 1.2(Q_{68}) + .57(Q_{144}) + .822(Q_{135})$$

Table XVII
Job Satisfaction Regression
 (First Term Rated Officers)

<u>Question Number</u>	<u>Regression Coefficient</u>	<u>Beta Weight</u>	<u>R</u>	<u>R²</u>	<u>ΔR²</u>	<u>Significance in Final Equation</u>
68	1.40	.383	.640	.410	.410	.000
153	.759	.250	.702	.492	.083	.000
14	.635	.181	.726	.528	.035	.000
69	.692	.222	.745	.555	.028	.000
Constant	5.57					

<u>Question Number</u>	<u>Subject</u>	<u>Scale</u>
68	Job Challenge	1 - 5
153	Personal Standing Satisfaction	1 - 7
14	Career Intent	1 - 5
69	Use of Training and Ability	1 - 5

$$\text{Job Satisfaction} = 5.57 + 1.40(Q68) + .759(Q153) + .635(Q14) + .692(Q69)$$

QOAFLI of personal standing satisfaction was contained in the enlisted regression equation. In fact, the regression equation for rated officers and enlisted personnel are very similar. Essentially the only difference between the two equations is that question 70, preparation for future responsibility, in the enlisted equation is replaced by question 14, career intent, in the rated officer equation. The rated officer equation seems to more resemble the enlisted equation than the non-rated officer equation. Whether this fact suggests that, in so far as job satisfaction is concerned, rated officers are more like enlisted personnel rather than their non-rated counterparts is not clear to this writer.

First term rated officer personnel with low job satisfaction can be described by the following:

- Low job challenge
- Low personal standing satisfaction
- Low career intent
- Relatively low present use of training and ability

Regression Conclusion. The regression equations for the five study groups have pointed to the fact that there are two main factors which predict or can be used to describe job satisfaction of first term Air Force personnel (see Table XVIII, p.80). The first factor is the amount of perceived challenge found by the person in his present job. The second factor is whether the presently held job makes good use of the training and ability of the person.

Table XVIII.
Job Satisfaction Regression Equation
Variables
(First Term Groups)

Question Number	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
14			X		X
68	X	X	X	X	X
69	X	X	X	X	X
70	X	X			
88			X		
135				X	
144				X	
153	X	X			X

Note: "X" indicates which variable was in each regression equation

<u>Question Number</u>	<u>Subject</u>
14	Career intent
68	Job Challenge
69	Use of Training and Ability
70	Preparation for future responsibility
88	Leadership/supervision satisfaction
135	Job Freedom
144	Personal growth satisfaction
153	Personal standing satisfaction

The finding that job challenge is a predictor of job satisfaction is similar to the findings of both Thompson (1975) and Vrooman (1976). Both Thompson and Vrooman found that the factor of being prepared to assume positions of future responsibility was a strong predictor of job satisfaction. This future responsibility factor proved not to be a predictor of job satisfaction for officer personnel in the present regression study, but was a predictor for enlisted personnel. The question concerning the present use of training and ability was not in the first QOAFLE survey, thus it was not available for analysis by either Thompson or Vrooman.

Thompson found that job freedom was a strong predictor of job satisfaction (Thompson, 1975:100-101). This was not the case in this present study. In fact, the job freedom predictor only showed up in the non-rated officer regression equation.

The differences between the results of this study and those of Thompson and Vrooman may be due to the fact that neither of them used all the survey questions as possible predictors, the study groups were different, and the training and ability question was not included in the first survey.

AID and Regression Summary

The job satisfaction AID and regression analyses presented in this chapter have produced markedly similar

results. The two analytical techniques have indicated that there are two main factors associated with the job satisfaction of first term Air Force personnel. These two main factors are job challenge and present use of training and ability.

There were several other factors found to be associated with the job satisfaction of first term Air Force personnel, though to a lesser extent.

For the interested reader, a correlation matrix, for each group, containing the criterion and predictor variables discussed in this chapter can be found in Tables XXX-XXXIV, Appendix C. A breakdown of the responses for questions 68 and 69 can be found in Tables XXXVII and XXXVIII, Appendix D.

A more complete and comprehensive discussion of the findings in this chapter is presented in chapter VI.

VI. SUMMARY AND CONCLUSIONS

Introduction

The results of the career intent and job satisfaction analyses were presented in chapters IV and V, respectively. In these chapters no serious attempt was made to combine the results of the AID analysis and the regression analysis, rather each analysis was presented separately. This chapter integrates these results and gives an overview of each subject analysis.

Career Intent

The combined results of the career intent analyses are presented in Table XIX, p.84. Inspection of this table reveals the fact that there are five variables (questions) which appeared in the separate analyses four or more times. The rank order of these five variables according to the frequency with which they emerged as predictors is as follows:

<u>Ques No.</u>	<u>Freq.</u>	<u>Subject</u>
50	10	Desirability of living on an Air Force base
42	9	Importance of the retirement benefit
175	8	Job satisfaction
144	6	Personal growth satisfaction
30	4	The perceived difficulty of obtain- ing a comparable job in private industry

Table XIX.
Summary of Career Intent Analysis
(First Term Groups)

Ques. No.	First Term Personnel		Enlisted Personnel		Officer Personnel		Non-Rated Officers		Rated Officers	
	AID	Regres.	AID	Regres.	AID	Regres.	AID	Regres.	AID	Regres.
30		X		X	X			X		
41									X	
42	X	X	X	X	X	X	X	X		X
46									X	
50	X	X	X	X	X	X	X	X	X	X
74									X	X
90	X					X				
138			X		X					
144			X		X	X	X	X		X
175	X	X	X	X	X		X		X	X

- 30 - Private industry job opportunity
41 - Dependents indemnity compensation benefit
42 - Retirement importance
46 - Recreation facilities importance
50 - Desirability of living on an Air Force base
74 - Requirement to participate in too many non-job related activities
90 - Quality of Air Force leadership
138 - Individual can get better break in civilian life
144 - Personal growth satisfaction
175 - Job satisfaction

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AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OHIO SCH--ETC F/G 5/9
AN ANALYSIS OF CAREER INTENT AND JOB SATISFACTION OF FIRST TERM--ETC(U)
DEC 77 J W PATTERSON
AFIT/6SM/SM/77D-25

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It appears that career intent for first term Air Force personnel is mainly a function of three of these variables; desirability of living on an Air Force base, importance of the retirement benefit, and job satisfaction. The person with low career intent could be described as a person who does not think that living on base is desirable, who views the military retirement benefit as relatively unimportant, and who has relatively low job satisfaction. There are several other factors, though not as strong as the three main factors mentioned above, which appear to be associated with career intent. Among these other factors are personal growth satisfaction and the perceived difficulty of obtaining a comparable job in private industry.

The fact that the desirability of living on an Air Force base and the importance of the retirement benefit showed up in this analysis is interesting, in that, to this writer's knowledge, these two factors have never been found to be strongly associated with the career intent of first term Air Force personnel.

For the purpose of the following discussion, only those variables that emerged, for each group, in both the regression and AID analyses are discussed. It is believed that these paired or dual variables should be the strongest predictors for a particular group. These dual variables are circled in Table XIX, p.84.

As can be seen in Table XIX, the desirability of living

on an Air Force base is present in every group analysis (question 50). The importance of the retirement benefit (question 42) is present in every analysis with the exception of the rated officer group. Job satisfaction (question 175) is present in the first term personnel, the enlisted personnel, and the rated officer groups. Personal growth satisfaction (question 144) is present in the officer and non-rated officer groups. The only other variable to show up in both analyses occurred in the rated officer group. This variable represents the belief that the Air Force requires the person to participate in too many non-job related activities (question 74). The fact that this variable showed up in both analyses for rated officers is interesting because of the fact that it did not show up in any of the other single analyses for any other group.

Discussion. It is felt that career intent of first term personnel can be influenced by several Air Force initiated actions.

Inspection of Table XXXVI, Appendix D, reveals the fact that there appears to be a large number of individuals who do not view an Air Force base as a desirable place to live. As was shown earlier in this study, career intent for first term personnel is strongly associated with the desirability of living on base factor. The more a person views an Air Force base as a desirable place to live, the higher

was his career intent. This close association between career intent and the desirability of living on base plus the fact that there appears to be quite a bit of dissatisfaction with on base living might indicate that the rules, regulations, and policies associated with on base living should be closely scrutinized by the Air Force leadership.

This writer believes that one such policy that might be looked at closely is barracks inspection. It seems inconsistent that enlisted personnel are subject to room inspection as if they were children, and yet are expected to behave as responsible adults, both on and off the job, often charged with the safe keeping of expensive equipment and sensitive documents.

Another possible cause of dissatisfaction with living on base is that many personnel are not given a free choice, but are forced to live in quarters. If personnel are allowed to exercise their own judgement on where they will live, the living on base factor will no longer be an irritant to many, leading to possible increases in retention rates.

Perhaps the Air Force policy of budgeting funds for the purpose of building and upgrading base living quarters should be looked at. It may be that these funds are being expended on quarters that many first term Air Force personnel do not want.

As pointed out earlier, the career intent of first term Air Force personnel is closely associated with the retirement

benefit factor. It would seem that changes to the present retirement benefit could greatly influence retention rates. If the present retirement system was to be greatly changed, the effects on the All Volunteer Force concept and the retention rates could prove to be disastrous.

Job satisfaction was also found to be a predictor of career intent. However, this factor proved not to be as strong a predictor as were the living on base and the retirement benefit factors. Currently, there are several Air Force programs in effect with the stated purpose of improving or increasing job satisfaction. As indicated by this study, these job satisfaction programs may produce a positive influence on career intent, thus improving retention rates. However, according to the present analysis, these job satisfaction programs are not attacking the most powerful career intent factor. It would seem, to this author, that the living on base factor would be easier to influence and have a larger effect on career intent than these job satisfaction programs.

It was found that the requirement to participate in too many non-job related activities was a predictor of career intent for first term rated officers. This factor was present in both the AID and regression analysis results. A reduction in the required non-job related activities might, therefore, have a positive influence on first term rated officer career intent.

It would appear that the factors found to be associated with the career intent of first term Air Force personnel can be roughly divided into two categories. One category consists of extrinsic factors or benefits and the other consists of intrinsic factors. The intrinsic factors would include job satisfaction, personal growth, and the perceived quality of Air Force leadership. The extrinsic factors or benefits include perceived outside job opportunities, retirement benefit, required activities participation, the desirability of living on base, and the view that a person can get more of an even break in civilian life. By so dividing the variables into these two categories, one can then hypothesize that career intent for first term Air Force personnel is a function of both internal and external factors.

Job Satisfaction

The combined results for the job satisfaction analyses are presented in Table XX, p. 90. Inspection of this table points to the fact that there are two main factors associated with the job satisfaction of first term Air Force personnel. These two factors were present in both the AID and regression analyses for each individual group. The first factor, and apparently the strongest factor, is job challenge. The second factor is the present use of training and ability. Both of these primary factors seem to be job related.

Table XX.
Summary of Job Satisfaction Analysis
(First Term Groups)

Ques. No.	First Term Personnel		Enlisted Personnel		Officer Personnel		Non-Rated Officers		Rated Officers	
	AID	Regres.	AID	Regres.	AID	Regres.	AID	Regres.	AID	Regres.
14	X					X				X
68	X	X	X	X	X	X	X	X	X	X
69	X	X	X	X	X	X	X	X	X	X
70	X	X	X	X						
75			X							
88	X				X	X	X			
119									X	
135					X		X	X		
144					X		X	X	X	
153		X		X					X	X

- 14 - Career intent
- 68 - Job challenge
- 69 - Use of training and ability
- 70 - Preparation for future responsibility
- 75 - Mission accomplishment vs personal concerns
- 88 - Leadership/Supervision satisfaction
- 119 - Work group encouragement
- 135 - Job freedom
- 144 - Personal growth satisfaction
- 153 - Personal standing satisfaction

There were four other factors which showed up at least four times in the AID and regression analyses. These other factors were preparation for increased future responsibility, Leadership/supervision satisfaction, personal growth satisfaction, and personal standing satisfaction. It is interesting to note that three of these factors are the previously defined QOAFLI's.

There were two other factors which showed up in three of the individual analyses. These were the factors of career intent and job freedom.

Those factors that were present in both the AID and regression analyses for a particular group are circled in Table XX, p.90. These circled variables point to the fact that there appears to be a difference between the additional factors which describe or predict job satisfaction for the various study groups. A short discussion of these additional factors is given in the next three paragraphs.

Job satisfaction for first term enlisted personnel seems to be influenced by the future responsibility factor, whereas, first term officer job satisfaction is influenced by the Leadership/Supervision satisfaction factor.

Job satisfaction for first term non-rated officer personnel seems to be influenced by job freedom and personal growth satisfaction, whereas, first term rated officer job satisfaction seems to be influenced by personal standing

satisfaction.

Whether there is an actual difference between the job satisfaction of these groups is not clear, because there is some overlapping of these factors in the different groups.

It would appear that the factors found to be associated with first term personnel job satisfaction can be divided into the two categories of intrinsic and job related factors. The job related factors consist of job challenge, use of training and ability, job freedom, and preparation for future responsibility. The intrinsic category consists of personal standing, Leadership/Supervision, and personal growth. By so dividing these factors, one can hypothesize that job satisfaction for first term Air Force personnel is a function of both job related and internal factors.

Career Intent and Job Satisfaction

A comparison of Tables XIX and XX points to the fact that there is only one variable (excepting the career intent and job satisfaction variables) which was a predictor for both career intent and job satisfaction. This variable was the personal growth factor.

The job satisfaction factor was used as a predictor a total of eight times in the career intent analysis, whereas career intent was only used three times in the job satisfaction analysis and was not very strong in these cases.

It was stated at the beginning of this paper that job

satisfaction was only studied in the hope that career intent might be better and more fully understood. The following discussion is an attempt to integrate these two analyses from a career intent standpoint.

It was found that career intent was mainly associated with three variables; the importance of the retirement benefit, the desirability of living on an Air Force base, and job satisfaction. A fourth factor was personal growth satisfaction. Job satisfaction was, in turn, mainly associated with the two variables of job challenge and present use of training and ability. It is proposed that the two main descriptors of job satisfaction can be used to more fully describe career intent.

It would then seem that career intent of first term Air Force personnel is described by the retirement benefit, the desirability of living on an Air Force base, job challenge, and present use of training and ability. If it is accepted that these main descriptors of job satisfaction also are descriptors of career intent, then it can be said that the main factors, found in this study, associated with first term career intent are extrinsic or job related factors.

The most significant finding of this study is that career intent for first term Air Force personnel is strongly associated with two previously unidentified factors. These two factors were the desirability of living on an Air

Force base and the retirement benefit.

Recommendations for Further Research

Continuing research based on surveys, such as the one used in this study, can provide Air Force leaders with a basis for better and more knowledgeable management of limited Air Force resources. The following areas for further research are suggested by this author as being of high potential value in explaining career intent of first term Air Force personnel.

1. A study of why the desirability of living on base is such a strong predictor of career intent. If the reasons for the dissatisfaction with on base living are found, the possibility of implementing new policies exists, which in turn could improve retention rates.

A further and more concentrated study in this area would involve the addition of several questions to be included in future surveys. Such questions should address various aspects of on base living. These questions could address such features as the rules, regulations, policies, and economics of on base living.

2. A study of why the importance of the retirement benefit is such a strong predictor of first term personnel career intent should be attempted. If it is found that the retirement benefit is indeed a major and continuing factor in the career decision, then the services might be able to

anticipate the possible adverse effects of a major change
in the existing retirement benefit.

Bibliography

- Alley, W.E. and R.B. Gould. Feasibility of Estimating Personnel Turnover From Survey Data-A Longitudinal Study. Brooks Air Force Base, Texas: Air Force Human Resources Laboratory, October, 1975.
- Bartholomew, C.W. Personal Value System and Career Objectives of Men Vis A Vis Women Air Force Officers. Unpublished Thesis. Wright-Patterson Air Force Base, Ohio: Air Force Institute of Technology, December, 1973.
- Brayfield, A.H. and W.H. Crockett. "Employee Attitudes and Employee Performance." Psychological Bulletin, 52:424 (1955).
- Defense Manpower Commission. Defense Manpower: The Keystone of National Security. Report to the President and the Congress. Washington D.C.: U.S. Government Printing Office, April, 1976.
- Ellis, R.W., Genersl. USAF Vice Chief of Staff. Department of Defense letter dated 26 March 1975.
- Flowers, Vincent S. and Charles L. Hughes. "Why Employees Stay." Harvard Business Review, 51:49-60 (1973).
- Herzberg, F., B. Mauser, R.O. Peterson, and D.F. Capwell. "Job Attitudes: Review of Research and Opinion." Pittsburg: Psychological Service of Pittsburg, 1957.
- Hoppock, R. Job Satisfaction. New York: Harper and Brothers, 1935.
- Kraut, A.I. "Predicting Turnover of Employees from Measured Job Attitudes." Organizational Behavior and Human Performance, 13:233-243 (1975).
- Nie, N.H., et.al. Statistical Package for the Social Sciences (SPSS) (Second Edition). New York: McGraw-Hill Book Company, 1975.
- Porter, L.W. and R.M. Steers. "Organizational, Work, and Personal Factors in Employee Turnover and Absenteeism." Psychological Bulletin, 180:151-176 (1973).

Pritchard, Robert D. and L.H. Peters. "Job Duties and Job Interests as Predictors of Intrinsic and Extrinsic Satisfaction." Organizational Behavior and Human Performance, 12:315-330 (1974).

Scoville, P.A. A Test of Herzberg's Two Factor Theory of Job Satisfaction. Unpublished Thesis. Wright-Patterson Air Force Base, Ohio: Air Force Institute of Technology, June, 1976.

Shenk, F. and J.M. Wilbourn. Officer Attitudes Related To Career Decisions. Lackland Air Force Base, Texas: Personnel Research Division, Air Force Human Resources Laboratory, December, 1971.

Sonquist, J.A. and J.N. Morgan. "The Detection of Interaction Effects." Monograph No. 35, Institute for Social Research, The University of Michigan, 1964.

Thompson, T.N. A Study of Job Satisfaction in the United States Air Force. Unpublished Thesis. Wright-Patterson Air Force Base, Ohio: Air Force Institute of Technology, October, 1975.

Tingey, Sherman and G.C. Inskeep. "Professional Turnover." Chemtech (November 1974), 651-655.

Vroom, V. Work and Motivation. New York: Wiley, 1964.

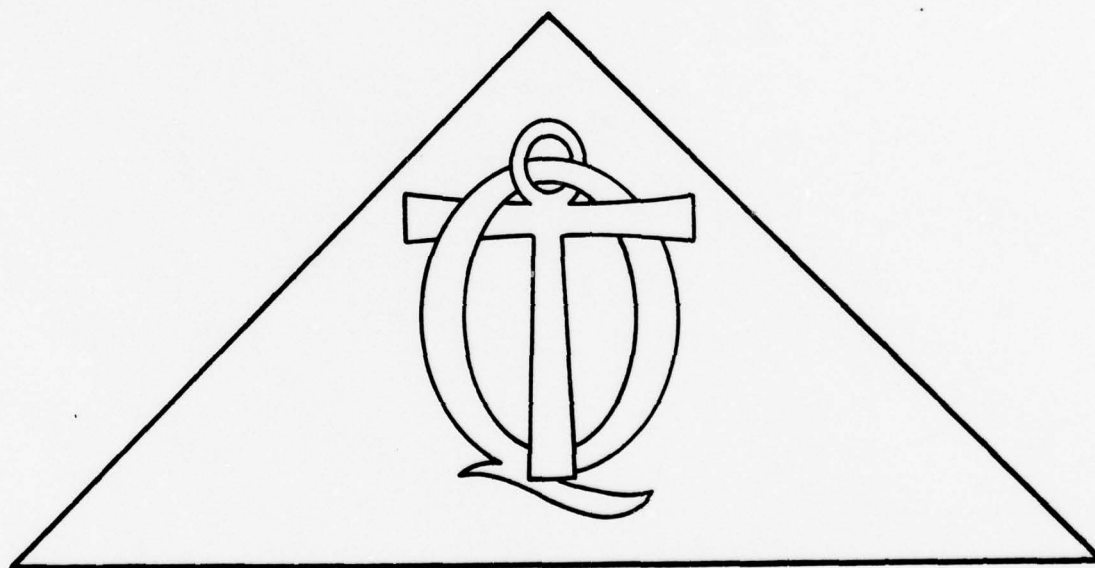
Vrooman, R.M. An Analysis of Factors Associated with the Job Satisfaction and Career Intent of Air Force Personnel with Less Than Six Years of Service. Unpublished Thesis. Wright-Patterson Air Force Base, Ohio: Air Force Institute of Technology, December, 1976.

Waters, L.K., D. Roach, and C.W. Waters. "Estimates of Future Tenure, Satisfaction, and Biographical Variables as Predictors of Termination." Personnel Psychology, 29:57-60 (1976).

APPENDIX A

United States Air Force Quality of
Air Force Life Active Duty Air Force
Personnel Survey

UNITED STATES AIR FORCE
QUALITY OF AIR FORCE LIFE
ACTIVE DUTY
AIR FORCE PERSONNEL SURVEY



SECOND EDITION

USAF SCN 77-37
MARCH 1977

LEADERSHIP/MOTIVATION DIVISION
HUMAN RESOURCES DEVELOPMENT
DIRECTORATE OF PERSONNEL PLANS
HQ UNITED STATES AIR FORCE

FOREWORD

This survey asks what you think about the Quality of Air Force Life. By completing it, you will provide Headquarters USAF with your attitudes and opinions about a number of areas of interest to the Air Force. Your responses are anonymous. They will be combined with the answers of all others taking the survey and compiled for use in forming future personnel plans and policies. Although the survey uses a special answer sheet for machine recording, a comments page is included at the end of the survey. You are encouraged to provide your comments on any subject of importance which you would consider helpful to Headquarters USAF in its efforts to insure the highest possible quality of Air Force life.

INSTRUCTIONS FOR COMPLETING SURVEY

Please do not fold, staple, or otherwise damage the answer sheet.

Select only one answer to each question.

Mark your answers on the answer sheet. It is not necessary to write on the survey itself. Please use a No. 2 pencil.

Be sure to mark your answers carefully so that you enter them opposite the same answer sheet number as survey question number.

Be sure that your answer marks are heavy and that you blacken the oval-shaped space. Erase all changes completely and carefully so as not to tear the answer sheet.

	A	B	C	D
Right Way				
to Mark	o	o	o	o
Answer Sheet	o	o	o	o
	A	B	C	D
Wrong Way	o	o	o	o
to Mark	o	o	o	o
Answer Sheet	o	o	o	o
	o	o	o	o

Since this survey is strictly anonymous, please do not write your name or your SSAN on either your answer sheet or survey booklet.

PRIVACY ACT STATEMENT

In accordance with paragraph 30, AFR 12-35, Air Force Privacy Act Program, the following information about this survey is provided as required by the Privacy Act of 1974:

a. Authority. This survey information is authorized for solicitation by Federal Statute Title 10, United States Code, Section 8012, Executive Order 9397, 22 Nov 1943, DoDI 1100.13, 17 Apr 1968, and AFR 30-23, 22 Sep 1976.

b. Principal Purpose. This survey is being conducted to gain the attitudes and opinions of Air Force members on a variety of subjects of interest to Headquarters USAF.

c. Routine Use. The survey data will be converted to statistical information for use by decision makers in development of future personnel plans and policies.

d. Participation in this survey is entirely voluntary.

e. No adverse action of any kind may be taken against any individual who elects not to participate in any or all of this survey.

- 1-2. Your survey administrator will provide you with a 2-letter code for your base. Mark the first letter of this code in item 1 and the second letter in item 2 of your answer sheet.
3. What is your present active duty grade?
- | | |
|--------------------------|---------------------------|
| A. Colonel | I. Senior Master Sergeant |
| B. Lieutenant Colonel | J. Master Sergeant |
| C. Major | K. Technical Sergeant |
| D. Captain | L. Staff Sergeant |
| E. First Lieutenant | M. Sergeant |
| F. Second Lieutenant | N. Senior Airman |
| G. Warrant Officer | O. Airman First Class |
| H. Chief Master Sergeant | P. Airman |
| | Q. Airman Basic |
4. What is your command of assignment (the command that maintains your personnel records)?
- | | |
|--|---|
| A. Alaskan Air Command | N. Air Force Data Automation Agency |
| B. U.S. Air Force Academy | O. Headquarters Command |
| C. Aerospace Defense Command | P. Military Airlift Command |
| D. U.S. Air Forces in Europe | Q. Pacific Air Forces |
| E. Air Force Accounting and Finance Center | R. Strategic Air Command |
| F. Air Force Logistics Command | S. Tactical Air Command |
| G. Air Force Systems Command | T. USAF Security Service |
| H. Air Reserve Personnel Center | U. Air Force Military Personnel Center |
| I. Air Training Command | V. Air Force Inspection and Safety Center |
| J. Air University | W. Air Force Audit Agency |
| K. Headquarters Air Force Reserve | X. Air Force Office of Special Investigations |
| L. Headquarters USAF | Y. Other |
| M. Air Force Communications Service | |
5. How much total active federal military service have you completed?
- | | |
|------------------------------|------------------------------|
| A. Less than 1 year | Q. 16 years but less than 17 |
| B. 1 year but less than 2 | R. 17 years but less than 18 |
| C. 2 years but less than 3 | S. 18 years but less than 19 |
| D. 3 years but less than 4 | T. 19 years but less than 20 |
| E. 4 years but less than 5 | U. 20 years but less than 21 |
| F. 5 years but less than 6 | V. 21 years but less than 22 |
| G. 6 years but less than 7 | W. 22 years but less than 23 |
| H. 7 years but less than 8 | X. 23 years but less than 24 |
| I. 8 years but less than 9 | Y. 24 years but less than 25 |
| J. 9 years but less than 10 | Z. 25 years but less than 26 |
| K. 10 years but less than 11 | 1. 26 years but less than 27 |
| L. 11 years but less than 12 | 2. 27 years or more |
| M. 12 years but less than 13 | |
| N. 13 years but less than 14 | |
| O. 14 years but less than 15 | |
| P. 15 years but less than 16 | |
6. What is your highest level of education now (include accepted GED credits)?
- | |
|---|
| A. Some high school (did not graduate) |
| B. High school graduate (no college) |
| C. Trade or technical school (no college) |
| D. Some college, but less than one year |
| E. One year college, but less than two |
| F. Two years college, but less than three (including two-year associate degree) |
| G. Three years or more college, no degree |
| H. Registered nurse diploma program |
| I. College degree (BS, BA, or equivalent, except LL.B) |
| J. Graduate work beyond bachelor degree (no master's degree) |
| K. Master's degree |
| L. Postgraduate work beyond master's degree |
| M. Doctorate degree (includes LL.B, J.D., D.D.S., M.D., and D.V.M.) |

7. What is your marital status?
- A. Married and spouse is not a member of a military service
 - B. Married and spouse is a member of a military service
 - C. Never been married
 - D. Divorced and not remarried
 - E. Legally separated
 - F. Widower/widow
8. Was (or is) your father a career military member?
- A. No
 - B. Yes
9. Are you a regular or reserve officer?
- A. Not applicable, I am enlisted
 - B. Reserve
 - C. Regular
10. What was the source of your commission?
- A. Not applicable, I am enlisted
 - B. OTS
 - C. OCS
 - D. ROTC
 - E. AECP
 - F. Aviation Cadet
 - G. Navigation Cadet
 - H. USAFA
 - I. USMA
 - J. USNA
 - K. Other
11. How many dependents do you have? Do not include yourself.
- A. None
 - B. One
 - C. Two
 - D. Three
 - E. Four
 - F. Five
 - G. Six
 - H. Seven
 - I. Eight or more
12. Which one of the following do you consider yourself?
- A. Black
 - B. Spanish Speaking Origin (Cuban, Puerto Rican, Mexican American, Spanish Descent)
 - C. American Indian
 - D. Asian Origin (Chinese, Japanese, Korean, Filipino or Asian American)
 - E. White (Other than Spanish Speaking Origin)
 - F. Other
13. What is your sex?
- A. Male
 - B. Female

14. Which one of the following best describes your attitude toward making the Air Force a career?

- A. Definitely intend to make the Air Force a career
- B. Most likely will make the Air Force a career
- C. Undecided
- D. Most likely will not make the Air Force a career
- E. Definitely do not intend to make the Air Force a career

15. Enter the code for the first digit of your duty Air Force Specialty Code (AFSC) opposite item 15 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

16. Enter the code for the second digit of your duty AFSC opposite item 16 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

17. Enter the code for the third digit of your duty AFSC opposite item 17 on your answer sheet.

- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

18. What is your current primary aeronautical rating?

- A. Pilot
- B. Navigator
- C. Flight Surgeon
- D. Other aeronautical rating
- E. Nonrated

19. What shift do you normally work?

- A. Day shift
- B. Swing shift
- C. Graveyard shift
- D. Rotate shifts

The following four questions address the subjects of economic standard and security. Please rate the degree of importance of these concepts to you and your degree of satisfaction with them based on the descriptions shown below:

ECONOMIC STANDARD: Satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

20. What degree of importance do you attach to the above? (Select one of the seven points on the importance scale)

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

21. To what degree are you satisfied with the ECONOMIC STANDARD aspects of your life? (Select one of the seven points on the satisfaction scale)

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

ECONOMIC SECURITY: Guaranteed employment; retirement benefits; insurance; protection for self and family.

22. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

23. To what degree are you satisfied with the ECONOMIC SECURITY aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

24. Do you hold a second job?

A. No

Yes, I work

- B. 1-5 hours per week
- C. 6-10 hours per week
- D. 11-20 hours per week
- E. 21-30 hours per week
- F. over 30 hours per week

25. Does your spouse work?

A. Not applicable, I am not married or I am legally separated

I am married and my spouse

- B. Resides with me, and has a paying job
- C. Resides with me, and does not work
- D. Does not reside with me, and has a paying job
- E. Does not reside with me, and does not work

26. The main reason that I have a second job, and/or that my spouse works is that we have to in order to make ends meet.
- A. Not applicable
 - B. Strongly disagree
 - C. Disagree
 - D. Undecided
 - E. Agree
 - F. Strongly agree
27. Do you or your dependents, if any, currently receive Federal, state, county, civic, or community (public) assistance?
- A. No
 - B. Yes, food stamps only
 - C. Yes, monetary payments only
 - D. Yes, food only
 - E. Yes, combination of the above
 - F. Yes, other
28. Are you now eligible for and do you receive food stamps?
- A. I am not eligible for food stamps
 - B. I am eligible for food stamps but do not use them
 - C. I am now receiving and using food stamps
 - D. I do not know if I am eligible for food stamps; but, I would not use them if I were eligible
 - E. I do not know if I am eligible for food stamps; but I would use them if I were eligible
29. How do you think your military pay (including all allowances and fringe benefits) compares with pay in civilian employment for similar work?
- A. Military pay is far higher than civilian
 - B. Military pay is somewhat higher than civilian
 - C. Both about equal
 - D. Military pay is somewhat less than civilian
 - E. Military pay is far less than civilian
30. If I left the Air Force tomorrow, I think it would be very difficult to get a job in private industry with pay, benefits, duties, and responsibilities comparable with those of my present job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree

31. The Air Force is providing enough information to its members to permit them to determine the current status of actions which may impact on their fringe benefits (commissary, retirement, medical care, etc.)

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

The following is a list of some Air Force benefits. Using the scale shown below, please indicate the importance of each benefit to you and your family now. Be sure the item number on your answer sheet is the same as the item number you are answering on the survey booklet.

	<u>Low</u> <u>Importance</u>		<u>Medium</u> <u>Importance</u>			<u>High</u> <u>Importance</u>		<u>Undecided,</u> <u>Don't know</u>
32. 30-days annual leave	A	B	C	D	E	F	G	H
33. Base exchange	A	B	C	D	E	F	G	H
34. Base housing	A	B	C	D	E	F	G	H
35. Military hospitals	A	B	C	D	E	F	G	H
36. Commissary	A	B	C	D	E	F	G	H
37. CHAMPUS	A	B	C	D	E	F	G	H
38. Legal assistance	A	B	C	D	E	F	G	H
39. Education and training	A	B	C	D	E	F	G	H
40. Survivor benefits	A	B	C	D	E	F	G	H
41. Dependents indemnity compensation	A	B	C	D	E	F	G	H
42. Retirement	A	B	C	D	E	F	G	H
43. Travel and transportation entitlements	A	B	C	D	E	F	G	H
44. Income tax advantage	A	B	C	D	E	F	G	H
45. Insurance discounted	A	B	C	D	E	F	G	H
46. Recreation facilities	A	B	C	D	E	F	G	H
47. Veterans benefits (GI Bill, etc.)	A	B	C	D	E	F	G	H

Listed below are a number of factors which have been associated with favorable attitudes toward an Air Force career.

FAVORABLE FACTORS

- A. Opportunity for training and education in the Air Force
- B. My Air Force job (challenging, provides sense of accomplishment, etc.)
- C. Pay and allowances
- D. Housing
- E. Promotion system and opportunity
- F. Fringe benefits (medical and dental care, BX, commissary, etc.)
- G. Leadership and supervision in the Air Force
- H. Travel and new experiences
- I. Have "say" in future assignments
- J. Security of Air Force life
- K. Air Force policies and procedures
- L. The retirement system
- M. Opportunity to serve my country
- N. Some other factor
- O. I do not intend to make the Air Force a career

48. Select the one factor which TODAY would influence you the most to make the Air Force a career.

Listed below are a number of factors which have been associated with unfavorable attitudes toward an Air Force career.

UNFAVORABLE FACTORS

- A. Family separation
- B. My Air Force job (little challenge, little sense of accomplishment, etc.)
- C. Pay and allowances
- D. Housing
- E. Promotion selection system
- F. Promotion opportunity
- G. Fringe benefits (medical and dental care, BX, commissary, etc.)
- H. Leadership and supervision in the Air Force
- I. Frequent PCS moves
- J. Little "say" in future assignments
- K. Insecurity of Air Force life
- L. The people
- M. Air Force policies and procedures
- N. Some other factor
- O. Nothing unfavorable

49. Select the one factor which TODAY would influence you the most NOT to make the Air Force a career.

50. An Air Force base is a desirable place to live.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of free time to you and your degree of satisfaction with it based on the following description:

FREE TIME: Amount, use, and scheduling of free time alone, or in voluntary associations with others; variety of activities engaged in.

51. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

52. To what degree are you satisfied with the FREE TIME aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

53. What percent of your friends are Air Force members?

- A. None
- B. 1-19%
- C. 20-39%
- D. 40-59%
- E. 60-79%
- F. 80-99%
- G. All

The following is a list of Federal holidays:

1 Jan 77 - New Year's Day	11 Oct 76 - Columbus Day
16 Feb 77 - President's Day	25 Oct 76 - Veterans' Day
31 May 76 - Memorial Day	25 Nov 76 - Thanksgiving Day
4 Jul 76 - Independence Day	25 Dec 76 - Christmas Day
6 Sep 76 - Labor day	

54. During the past year how many of these nine holidays were you not able to take off because you were required to be at work in a duty status?

- | | |
|-----------|-----------|
| A. 0 days | F. 5 days |
| B. 1 day | G. 6 days |
| C. 2 days | H. 7 days |
| D. 3 days | I. 8 days |
| E. 4 days | J. 9 days |

Please rate the degree of importance of your work to you and your degree of satisfaction with it based on the following description:

WORK: Doing work that is personally meaningful and important; pride in my work; job satisfaction; recognition for my efforts and my accomplishments on the job.

55. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

56. To what degree are you satisfied with the WORK aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

57. Which one of the following shows how much of the time you feel satisfied with your job?
- A. All the time
 - B. Most of the time
 - C. A good deal of the time
 - D. About half of the time
 - E. Occasionally
 - F. Seldom
 - G. Never
58. Choose the one of the following statements which best tells how well you like your job.
- A. I hate it
 - B. I dislike it
 - C. I don't like it
 - D. I am indifferent to it
 - E. I like it
 - F. I am enthusiastic about it
 - G. I love it
59. Which one of the following best tells how you feel about changing your job?
- A. I would quit this job at once if I could
 - B. I would take almost any other job in which I could earn as much as I am earning now
 - C. I would like to change both my job and my occupation
 - D. I would like to exchange my present job for another one
 - E. I am not eager to change my job, but I would do so if I could get a better job
 - F. I cannot think of any jobs for which I would exchange
 - G. I would not exchange my job for any other
60. Which one of the following shows how you think you compare with other people?
- A. No one likes his job better than I like mine
 - B. I like my job much better than most people like theirs
 - C. I like my job better than most people like theirs
 - D. I like my job about as well as most people like theirs
 - E. I dislike my job more than most people dislike theirs
 - F. I dislike my job much more than most people dislike theirs
 - G. No one dislikes his job more than I dislike mine

Listed below are six characteristics which could be present on any job. Using the scale below, indicate the degree to which you would like to have each characteristic present in your job.

	<u>Moderate</u> <u>or Less</u>		<u>High</u>		<u>Extremely</u> <u>High</u>	
61. Stimulating and challenging work	A	B	C	D	E	F G
62. Chances to exercise independent thought and action in my job	A	B	C	D	E	F G
63. Opportunities to learn new things from my work	A	B	C	D	E	F G
64. Opportunities to be creative and imaginative in my work	A	B	C	D	E	F G
65. Opportunities for personal growth and development in my job	A	B	C	D	E	F G
66. A sense of worthwhile accomplishment in my work	A	B	C	D	E	F G

67. Which one of the following factors do you consider the most essential for having a satisfying job?
- A. Challenging work
 - B. Recognition for my work
 - C. Sense of achievement
 - D. Encouragement to use initiative and creativity
 - E. Having responsibility for a job
 - F. Having a good supervisor
68. How do you evaluate your present Air Force job?
- A. Not at all challenging
 - B. Not very challenging
 - C. Somewhat challenging
 - D. Challenging
 - E. Very challenging
69. My present job makes good use of my training and ability.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
70. Do you think your present job is preparing you to assume future positions of greater responsibility?
- A. Definitely no
 - B. Probably no
 - C. Undecided
 - D. Probably yes
 - E. Definitely yes
71. For your next assignment, do you want a job which has greater responsibility than your current job?
- A. Definitely no
 - B. Probably no
 - C. Not sure
 - D. Probably yes
 - E. Definitely yes
72. Do you feel that the work you are now doing is appropriate to the grade you hold:
- A. My grade is much too high for the work I am doing
 - B. My grade is somewhat too high for the work I am doing
 - C. My grade is about right for the work I am doing
 - D. My grade is somewhat too low for the work I am doing
 - E. My grade is much too low for the work I am doing
73. What is your estimate of the average number of hours per week you spend on the job?
- A. Less than 30 hours
 - B. 31 - 35
 - C. 36 - 40
 - D. 41 - 45
 - E. 46 - 50
 - F. 51 - 55
 - G. 56 - 60
 - H. More than 60

74. The Air Force requires me to participate in too many activities that are not related to my job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
75. Air Force members should take more interest in mission accomplishment and less interest in their personal concerns.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
76. I wish that more Air Force members had a genuine concern for national security.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree

Listed below are 10 concepts which can be related to your Air Force life (questions 77-86). Rank them in order of their importance to you. Example: If you believe that "A comfortable life" (number 77) is the most important to you of the 10 concepts, you would mark an "A" for question 77 on your answer sheet. If you believe that "loyalty" is the second most important concept, you would mark a "B" for question 81 on your answer sheet. Continue ranking until you have marked a "J" for the concept of least importance to you.

- | | |
|-------------------------|-------------------------|
| A. Most important | F. Sixth most important |
| B. | G. |
| C. | H. |
| D. | I. |
| E. Fifth most important | J. Least important |

- 77. A comfortable life (a good salary, few worries about money)
- 78. A sense of accomplishment (making a meaningful contribution)
- 79. Family security (taking care of my family)
- 80. Individual freedom (independence, being free to choose)
- 81. Loyalty (dedication to military and its mission)
- 82. Personal recognition (having personal accomplishments recognized and rewarded)
- 83. National security (protection from attack, an effective military)
- 84. Integrity (absolute honesty, devotion to duty)
- 85. Trust (being able to depend on those around me, including my leaders, my peers, and my subordinates)
- 86. Job satisfaction (doing work that I like)

Please rate the degree of importance of leadership/supervision to you and your degree of satisfaction with it based on the following description:

LEADERSHIP/SUPERVISION: My supervisor has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

87. What degree of importance do you attach to the above? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

88. To what degree are you satisfied with the LEADERSHIP/SUPERVISION aspects of your life? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

89. What is your opinion of the leadership ability of your immediate supervisor?

A. Excellent
B. Above average
C. Average
D. Below average
E. Poor

90. What is your opinion of the quality of leadership in the Air Force?

A. Excellent
B. Above average
C. Average
D. Below average
E. Poor

91. The high degree of responsibility assigned to younger, lower ranking Air Force members places too great a strain upon them.

A. Strongly disagree
B. Disagree
C. Inclined to disagree
D. Undecided
E. Inclined to agree
F. Agree
G. Strongly agree

Of the following descriptions of discipline, select the one which most nearly corresponds to your definition of what discipline should be on the part of an individual in a peacetime Air Force.

92. Discipline is the willingness of the individual to:

A. Respond quickly and without question to the direct lawful orders of a superior
B. Adapt his behavior to the expectations of the organization
C. Self-direct his behavior so that it helps in the accomplishments of the mission of the organization.

93. What is your opinion of discipline in today's Air Force?

A. Too strict
B. Somewhat strict
C. About right
D. Somewhat lenient
E. Too lenient

Listed below are 23 factors or policies which affect Air Force personnel. Using the scale listed immediately below, please rate each of the factors. Mark only one response for each item.

- A. Standard too strict, enforcement too strict
- B. Standard too strict, enforcement about right
- C. Standard too strict, enforcement too lax
- D. Standard about right, enforcement too strict
- E. Standard about right, enforcement about right
- F. Standard about right, enforcement too lax
- G. Standard too lax, enforcement too strict
- H. Standard too lax, enforcement about right
- I. Standard too lax, enforcement too lax

- 94. Overall personal appearance.
- 95. Wear of the uniform.
- 96. Haircuts.
- 97. Mustaches.
- 98. Beard policy.
- 99. Military courtesy and customs.
- 100. Personnel weight control program.
- 101. What my immediate supervisor expects of me.
- 102. My commander's policies and procedures.
- 103. Officer/enlisted on-the-job relationships.
- 104. Drills and ceremonies.
- 105. Respect for supervisors.
- 106. Safety procedures.
- 107. Working hours.
- 108. Leave procedures.
- 109. Living in on-base family housing
- 110. Living in on-base dormitories.
- 111. Quality of work expected on the job.
- 112. Quantity of work expected on the job.
- 113. Officer supervisor/subordinate relationships.
- 114. Enlisted supervisor/subordinate relationships.
- 115. Unit mission accomplishment.
- 116. Air Force life in general.

The following is a list of statements about leadership/supervision. Please indicate whether you agree or disagree with each statement using the scale shown.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Undecided</u>	<u>Agree</u>	<u>Strongly Agree</u>
117. The Air Force does a good job of keeping me informed about what is going on.	A	B	C	D	E
118. More supervision of member performance and behavior is needed at lower levels within the Air Force.	A	B	C	D	E
119. Persons in my work group encourage each other to work as a team.	A	B	C	D	E
120. My supervisor tries to get my ideas before making decisions that are important to me.	A	B	C	D	E
121. Persons in my work group offer each other new ideas for solving job-related problems.	A	B	C	D	E
122. My supervisor encourages the people in my work group to exchange opinions and ideas.	A	B	C	D	E
123. I would say that the lowest level supervisors in my organization usually have enough say or influence on what goes on.	A	B	C	D	E
124. When decisions are being made in my organization, the persons who will be affected most are asked for their ideas.	A	B	C	D	E
125. Persons who do not supervise others in my organization have an adequate amount of say or influence on what goes on.	A	B	C	D	E
126. Information is usually widely shared in my organization so that those who make the decisions will base their decisions on the best available know-how.	A	B	C	D	E
127. I get the information I need to do my job in the best possible way.	A	B	C	D	E
128. When I talk to people in my work group, they pay attention to what I am saying.	A	B	C	D	E
129. My supervisor is friendly and easy to approach.	A	B	C	D	E
130. My supervisor pays attention to what I have to say.	A	B	C	D	E

131. How often do you and your supervisor get together to set your personal performance objectives?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
132. How often are you given feedback from your supervisor about your job performance?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
133. Does your immediate supervisor give you recognition for a job well done?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Always
134. What kind of influence does your immediate supervisor have on your organization?
- A. Very favorable
 - B. Favorable
 - C. Neutral
 - D. Unfavorable
 - E. Very unfavorable
135. Are you given the freedom you need to do your job well?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Often
 - E. Always

Please rate the degree of importance of the concept of equity to you and your degree of satisfaction with it based on the following description:

EQUITY: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

136. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High		Very High	
Importance			Importance		Importance	

137. To what degree are you satisfied with the EQUITY aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly					Highly	
Dissatisfied			Neutral		Satisfied	

138. An individual can get more of an even break in civilian life than in the Air Force.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

139. The Air Force promotion system is effective (i.e., the best qualified people are generally selected for promotion).

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree

140. What of the following best represents your opinion of the E-5/6/7 WAPS factors?

- A. Not enough weight is given to performance reports
- B. Not enough weight is given to tests
- C. Not enough weight is given to seniority
- D. Not enough weight is given to decorations
- E. Too much weight is given to performance reports
- F. Too much weight is given to tests
- G. Too much weight is given to seniority
- H. Too much weight is given to decorations
- I. No opinion

141. On the same jobs as men, do Air Force women tend to do more, less, or about the same amount of work?

- A. Much more
- B. More
- C. About the same
- D. Less
- E. Much less

142. How does your supervisor deal with your women co-workers?

A. Not applicable, there are no women in my unit

My supervisor is a woman and she:

- B. Expects more from the women workers than the men
- C. Treats men and women workers the same
- D. Gives women workers the easy jobs, and the hard jobs to men

My supervisor is a man and he:

- E. Expects more from the women workers than the men
- F. Treats men and women workers the same
- G. Gives women workers the easy jobs, and the hard jobs to the men

Please rate the degree of importance of personal growth to you and your degree of satisfaction with it based on the following description:

PERSONAL GROWTH: To be able to develop individual capacities, education/training; making full use of my abilities; the chance to further my potential.

143. What degree of importance do you attach to the above?

A.....B.....C.....D.....E.....F.....G
Moderate High Very High
Importance Importance Importance

144. To what degree are you satisfied with the PERSONAL GROWTH aspects of your life?

A.....B.....C.....D.....E.....F.....G
Highly Highly
Dissatisfied Neutral Satisfied

145. For the most part, how suitable for your needs was the course material in the NCO Orientation Course (Phase I, NCO PME)?

- A. Excellent
- B. Good
- C. Fair
- D. Poor
- E. Have not attended the course
- F. Not applicable, I am an officer

146. Overall, my attendance at the NCO Orientation Course (Phase I, NCO PME) was a good, useful investment of my time and effort.

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree
- H. Have not attended the course
- I. Not applicable, I am an officer

147. Air Force training programs do not do a very good job of preparing people to get along with other people.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

148. Technical School Training does not do an adequate job of preparing an airman for his first duty assignment.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

149. Basic Military Training does not do an adequate job of preparing airmen for their first duty assignment.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

150. Today's Air Force training programs should devote some time to help prepare people to get along with each other better.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

151. Human Relations Education courses are effective in bringing about better working relations on the job.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of the concept of personal standing to you and your degree of satisfaction with it based on the following description:

PERSONAL STANDING: To be treated with respect; prestige; dignity; reputation; status.

152. What degree of importance do you attach to the above?

A.....B.....C.....D.....E.....F.....G
Moderate High Very High
Importance Importance Importance

153. To what degree are you satisfied with the PERSONAL STANDING aspects of your life?

A.....B.....C.....D.....E.....F.....G
Highly Highly
Dissatisfied Neutral Satisfied

154. I have a lot of respect for most of the Senior NCOs (E7-E9) I know.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

155. Recent changes in Air Force personnel programs have been aimed at enhancing NCO prestige. Do you believe these efforts will be successful?

- A. Definitely yes
- B. Probably yes
- C. Undecided
- D. Probably no
- E. Definitely no

156. The prestige of the military has declined over the past several years.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

157. Most of the Senior NCOs (E7-E9) understand and are able to communicate with the people who work with them.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

158. Senior NCOs (E7-E9) are usually given jobs with less responsibility than they should have.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate the degree of importance of health to you and your degree of satisfaction with it based on the following description:

HEALTH: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care services provided.

159. What degree of importance do you attach to the above?

A.....B.....C.....D.....E.....F.....G
Moderate High Very High
Importance Importance Importance

160. To what degree are you satisfied with the HEALTH aspects of your life?

A.....B.....C.....D.....E.....F.....G
Highly Highly
Dissatisfied Neutral Satisfied

161. Generally, how satisfied are you with the medical care you received at military medical facilities during the past 12 months?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neither satisfied nor dissatisfied
- D. Satisfied
- E. Highly satisfied
- F. Not applicable, did not visit military medical facility in past 12 months

162. Generally, how satisfied are you with the medical care your children received in military medical facilities during the past 12 months?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neither satisfied nor dissatisfied
- D. Satisfied
- E. Highly satisfied
- F. Not applicable

163. Generally, the amount of time I have had to wait for treatment at military medical facilities during the past 12 months has been reasonable.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
 - F. Not applicable
164. Generally, medical personnel at military medical facilities are pleasant and concerned about patients.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
165. Approximately how many times did you and/or your children visit a military medical facility during the past 12 months.
- A. None
 - B. 1-4 times
 - C. 5-8 times
 - D. 9-12 times
 - E. More than 12 times

COMMENTS SHEET

QUALITY OF AIR FORCE LIFE SURVEY

Please provide any comments which you feel would be of value to Hq USAF in our efforts to improve the quality of Air Force life. If you use this sheet, please detach it and return it with your answer sheet.

Grade: _____

MAJOR COMMAND: _____

THANK YOU FOR COMPLETING THIS SURVEY

APPENDIX B

List of Variables Used
in Final Analyses

Table XXI
List of Variables Used in Final Career Intent
AID Runs for All Groups

<u>Question Number</u>	<u>Subject</u>
3	Present grade
6	Education level
8	Father career military
11	Number of dependents
13	Sex
14	Career intent
18	Aeronautical rating
20	Economic standard importance
21	Economic standard satisfaction
22	Economic security importance
23	Economic security satisfaction
29	Military pay comparison with civilian pay
30	Private industry job importance
31	Fringe benefit information
33	Base exchange importance
34	Base housing importance
36	Commissary importance
37	CHAMPUS importance
39	Education and training importance
41	Dependents indemnity compensation importance
42	Retirement importance
45	Insurance discounted importance
46	Recreation facilities importance
47	Veterans benefit importance
50	Air Force desireability
51	Free time importance
52	Free time satisfaction
53	Percent of friends are AF members
54	Number of holidays worked
61	Desire for stimulating and challenging work
62	Desire for independent thought and action
63	Desire to learn new things
64	Desire to be creative and imaginative
65	Desire for worthwhile job accomplishment
68	Job challenge
69	Use of training and ability
70	Preparation for future responsibility
73	Average number of work hours per week
74	Requirement to participate in too many activities
76	Concern for national security
87	Leadership/supervision importance
88	Leadership/supervision satisfaction

Table XXI (continued)

89	Leadership ability of supervisor
90	Quality of AF leadership
93	Opinion of discipline in Air Force
117	Informed of what is going on
118	Need for more lower level supervision
119	Work group encouragement
126	Dissemination of information within organization
127	Access to needed information
130	Supervisor attention
134	Influence of supervisor on organization
135	Job freedom
136	Equity importance
137	Equity satisfaction
138	Individual can get better break in civilian life
139	Effective promotion system
143	Personal growth importance
144	Personal growth satisfaction
147	Training people to get along with others
148	Preparation for first assignment
149	Basic training preparation for first assignment
150	Training programs should better prepare people to get along
152	Personal standing importance
153	Personal standing satisfaction
154	Respect for senior NCOs
155	Success of NCO prestige programs
156	Decline of military prestige
158	Senior NCO responsibility
159	Health importance
160	Health satisfaction
161	Satisfaction with medical care
162	Satisfaction with medical care of children
163	Time waiting for medical care
164	Pleasant and concerned medical personnel
175	Job satisfaction
176	Weight variable

Table XXII.
List of Variables Used in Final Career Intent
Regression Runs for All Groups

<u>Question Number</u>	<u>Subject</u>
5	Years service
11	Number of dependents
14	Career intent
20	Economic standard importance
21	Economic standard satisfaction
22	Economic security importance
23	Economic security satisfaction
29	Military pay comparison with civilian pay
30	Private industry job opportunity
31	Fringe benefit information
32	30 - day leave importance
33	Base exchange importance
34	Base housing importance
35	Military hospital importance
36	Commissary importance
37	CHAMPUS importance
38	Legal assistance importance
39	Education and training importance
40	Survivor benefit importance
41	Dependents indemnity importance
42	Retirement importance
43	Travel and transportation entitlements importance
44	Income tax advantage importance
45	Insurance discounted importance
46	Recreation facilities importance
47	Veterans benefit importance
50	Air Force Base desirability
51	Free time importance
52	Free time satisfaction
53	Percent of friends are AF members
54	Number of holidays worked
61	Desire for stimulating and challenging work
64	Desire to be creative and imaginative
65	Desire for personal growth and satisfaction
67	Satisfying job factors
68	Job challenge
69	Use of training and ability
70	Preparation for future responsibility
71	Desire for greater responsibility
73	Average number of work hours per week
74	Requirement to participate in too many activities
75	Mission accomplishment concern
76	Concern for national security

Table XXII (Continued)

87	Leadership/supervision importance
88	Leadership/supervision satisfaction
89	Leadership ability of supervisor
90	Quality of AF leadership
91	Responsibility assigned to young/low ranking members
92	Definition of discipline
93	Opinion of discipline in Air Force
117	Informed of what is going on
118	Need for more lower level supervision
119	Work group encouragement
126	Dissemination of information within organization
127	Access to needed information
130	Supervisor attention
132	Feedback from supervisor (how often)
134	Influence of supervisor on organization
135	Job Freedom
136	Equity importance
137	Equity satisfaction
138	Individual can get better break in civilian life
139	Effective promotion system
143	Personal growth importance
144	Personal growth satisfaction
145	NCO orientation course suitability
146	NCO orientation course attendance
147	Training people to get along with others
148	Preparation for first assignment
152	Personal standing importance
153	Personal standing satisfaction
154	Respect for senior NCOs
155	Success of NCO prestige programs
156	Decline of military prestige
157	Ability of senior NCOs to understand and communicate
158	Senior NCO responsibility level
159	Health importance
160	Health satisfaction
161	Satisfaction with medical care
162	Satisfaction with medical care of children
163	Time waiting for medical care
164	Pleasant and concerned medical personnel
165	Number of times medical facility visited
175	Job satisfaction
176	Weight variable

Table XXIII
List of Variables Used in Final Job Satisfaction
AID Runs for All Groups

<u>Question Number</u>	<u>Subject</u>
6	Education level
14	Career intent
18	Aeronautical rating
20	Economic standard importance
21	Economic standard satisfaction
22	Economic security importance
23	Economic security satisfaction
29	Military pay comparison with civilian pay
30	Private industry job opportunity
33	Base exchange importance
34	Base housing importance
35	Military hospital importance
36	Commissary importance
38	Legal assistance importance
39	Education and training importance
40	Survivor benefits importance
41	Dependents indemnity compensation importance
42	Retirement importance
44	Income tax advantage importance
46	Recreation facilities importance
50	Air Force Base desirability
51	Free time importance
52	Free time satisfaction
53	Percent of friends are AF members
54	Number of holidays worked
61	Desire for stimulating and challenging work
62	Desire for independent thought and action
63	Desire to learn new things
64	Desire to be creative and imaginative
65	Desire for personal growth and development
66	Desire for worthwhile job accomplishment
67	Satisfying job factors
68	Job challenge
69	Use of training and ability
70	Preparation for future responsibility
71	Desire for greater responsibility
72	Appropriate grade for present work
73	Average number of work hours per week
74	Requirement to participate in too many activities
75	Mission accomplishment concern
76	Concern for national security
87	Leadership/supervision importance

Table XXIII (continued)

88	Leadership/supervision satisfaction
89	Leadership ability of supervision
90	Quality of AF leadership
91	Responsibility assigned to young, low ranking members
119	Work encouragement
120	Supervisor consultation with subordinates
121	Exchange of ideas within work group
122	Supervisor encouragement of idea exchanges
124	Decision participation
126	Dissemination of information within organization
127	Access to needed information
128	Individual influence within work group
130	Supervisor attention
131	Subordinate/supervisor performance goal setting
132	Feedback from supervisor (how often)
133	Recognition for a job well done
134	Influence of supervisor on organization
135	Job freedom
136	Equity importance
137	Equity satisfaction
138	Individual can get better break in civilian life
139	Effective promotion system
142	Treatment of women by supervisor
143	Personal growth importance
144	Personal growth satisfaction
146	NCO Orientation Course attendance
147	Training people to get along with others
149	Basic training preparation for first term assignment
152	Personal standing importance
153	Personal standing satisfaction
154	Respect for senior NCOs
155	Success of NCO prestige programs
156	Decline of military prestige
159	Health importance
160	Health satisfaction
161	Satisfaction with medical care
163	Time waiting for medical care
164	Pleasant and concerned medical personnel
175	Job satisfaction
176	Weight variable

Table XXIV
List of Variables Used in Final Job Satisfaction
Regression Runs for All Groups

<u>Question Number</u>	<u>Subject</u>
5	Years service
14	Career intent
20	Economic standard importance
21	Economic standard satisfaction
22	Economic security importance
23	Economic security satisfaction
33	Base exchange importance
34	Base housing importance
35	Military hospital importance
36	Commissary importance
37	CHAMPUS importance
38	Legal assistance importance
39	Education and training importance
40	Survivor benefit importance
41	Dependents indemnity importance
42	Retirement importance
43	Travel and transportation entitlements importance
44	Income tax advantage importance
45	Insurance discounted importance
46	Recreation facilities importance
50	Air Force Base desirability
51	Free time importance
52	Free time satisfaction
53	Percent of friends are AF members
54	Number of holidays worked
61	Desire for stimulating and challenging work
62	Desire for independent thought and action
63	Desire to learn new things
64	Desire to be creative and imaginative
65	Desire for personal growth and development
66	Desire for worthwhile job accomplishment
67	Satisfying job factors
68	Job challenge
69	Use of training and ability
70	Preparation for future responsibility
71	Desire for greater responsibility
72	Appropriate grade for present work
73	Average number of work hours per week
74	Requirement to participate in too many activi- ties
75	Mission accomplishment concern
76	Concern for national security

Table XXIV (continued)

87	Leadership/supervision importance
88	Leadership/supervision satisfaction
89	Leadership ability of supervisor
90	Quality of AF leadership
91	Responsibility assigned to young/low ranking members
92	Definition of discipline
93	Opinion of discipline in AF
119	Work group encouragement
120	Supervisor consultation with subordinates
122	Supervisor encouragement of idea exchanges
124	Decision participation
126	Dissemination of information within organization
127	Access to needed information
128	Individual influence within work group
130	Supervisor attention
131	Subordinate/supervisor performance goal setting
132	Feedback from supervisor (how often)
133	Recognition for a job well done
134	Influence of supervisor on organization
135	Job freedom
136	Equity importance
137	Equity satisfaction
138	Individual can get better break in civilian life
139	Effective promotion system
143	Personal growth importance
144	Personal growth satisfaction
147	Training people to get along with others
149	Basic training preparation for first assignment
152	Personal standing importance
153	Personal standing satisfaction
155	Success of NCO prestige programs
156	Decline of military prestige
159	Health importance
160	Health satisfaction
162	Satisfaction with medical care of children
163	Time waiting for medical care
175	Job satisfaction
176	Weight variable

APPENDIX C

Correlation Matrices of
Selected Variables

[illegible]

- 14 - Career intent
- 30 - Private industry job opportunity
- 41 - Dependents indemnity compensation benefit
- 42 - Retirement importance
- 46 - Recreation facilities importance
- 50 - Desirability of living on an Air Force base
- 74 - Requirement to participate in too many non-job related activities
- 90 - Quality of Air Force leadership
- 138 - Individual can get better break in civilian life
- 144 - Personal growth and satisfaction
- 175 - Job satisfaction

Table XXV. Career Intent Correlation Matrix (All First Term Personnel)

[illegible]

- 14 - Career intent
- 30 - Private industry job opportunity
- 41 - Dependents indemnity compensation benefit
- 42 - Retirement importance
- 46 - Recreation facilities importance
- 50 - Desirability of living on an Air Force base
- 74 - Requirement to participate in too many non-job related activities
- 90 - Quality of Air Force leadership
- 138 - Individual can get better break in civilian life
- 144 - Personal growth and satisfaction
- 175 - Job satisfaction

Table XXVII. Career Intent Correlation Matrix (First Term Officers)

APPENDIX D

Selected Frequency Distributions

Table XXXV

Frequency Distribution of Responses To
Question 42 (Retirement Importance)

Response	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
1	301	227	74	58	16
2	122	69	53	35	18
3	161	90	71	50	21
4	221	137	84	56	28
5	277	133	144	100	44
6	450	240	210	131	79
7	1473	876	597	368	229
8	132	114	18	13	5
Average	5.38	5.36	5.56	5.52	5.85

Note: Missing responses not shown

Question 42:

Using the scale below please indicate the importance of each benefit (Retirement) to you and your family now.

<u>Low</u> <u>Importance</u>		<u>Medium</u> <u>Importance</u>			<u>High</u> <u>Importance</u>		<u>Undecided,</u> <u>Don't Know</u>
1	2	3	4	5	6	7	8

Table XXXVI

Frequency Distribution of Responses To
Question 50 (Desirability of living on base)

Response	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
1	516	382	133	74	59
2	754	443	311	193	118
3	840	590	250	164	86
4	871	395	476	327	149
5	154	75	79	52	27
Average	2.63	2.59	2.95	3.05	2.89

Note: Missing responses not shown

Question 50:

An Air Force base is a desirable place to live

1 = Strongly disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly agree

Table XXXVII

Frequency Distribution of Responses To
Question 68 (Job Challenge)

Response	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
1	333	269	64	42	22
2	538	386	152	116	36
3	906	557	349	225	124
4	913	470	443	277	166
5	412	173	239	149	90
Average	2.96	2.90	3.48	3.44	3.53

Note: Missing responses not shown

Question 68:

How do you evaluate your present Air Force job?

- 1 = Not at all challenging
- 2 = Not very challenging
- 3 = Somewhat challenging
- 4 = Challenging
- 5 = Very challenging

Table XXXVIII

Frequency Distribution of Responses To
Question 69 (Use of Training and Ability)

Response	First Term Personnel	Enlisted Personnel	Officer Personnel	Non-Rated Officers	Rated Officers
1	529	381	148	101	47
2	683	420	263	189	74
3	531	382	149	104	45
4	1054	541	513	315	198
5	314	138	176	101	75
Average	2.87	2.83	3.27	3.17	3.38

Note: Missing responses not shown

Question 69:

My present job makes good use of my training and ability.

1 = Strongly disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly agree

Vita

James W. Patterson was born on 23 November 1943 in Spokane, Washington, where he attended grade school, high school, and college. After graduation from Gonzaga University, Spokane, Washington, in 1969 with a B.S. in Mechanical Engineering, he entered the United States Air Force. After OTS, Lackland AFB, Texas, he was assigned to undergraduate pilot training at Columbus AFB, Mississippi. Following that he spent ten months convalescent leave at Fairchild AFB, Washington. He was then sent to Hurlburt Field, Florida, where he flew C-123K's. After the C-123K was phased out of the active inventory, he flew OV-10's in Thailand, where he was also Wing Maintenance Quality Control officer. Upon return from Thailand, he was assigned to fly C-141's at Travis AFB, California, where he was assistant operations officer. In August of 1976, Captain Patterson entered the Air Force Institute of Technology as a graduate student in Systems Management.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study analyzes career intent and job satisfaction of first term Air Force personnel. The data were obtained from a Quality of Air Force Life survey conducted in May and June of 1977. The main analysis techniques used were the Automatic Interaction Detection algorithm (AID) and regression analysis. The survey was analyzed in terms of five first term groups: all first term personnel, first term enlisted, first term officers , first term officers, first term non-rated officers, first term rated officers.		

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The factors found to be most highly associated with the career intent of first term Air Force personnel were:

1. Importance of the military retirement benefit
2. Desirability of living on an Air Force base
3. Job satisfaction
4. Personal growth satisfaction

The factors found to be most highly associated with job satisfaction of first term Air Force personnel were:

1. Job challenge
2. Use of training and ability

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REPLY TO
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SUBJECT: Release of Student Thesis to Defense Documentation Center (DDC)

TO: AFIT/ENS (Maj McNichols)

1. We have reviewed the thesis "An Analysis of Career Intent and Job Satisfaction of First Term Air Force Personnel" by Capt James W. Patterson. We approve release of it to the DDC. Capt Patterson did a commendable job on the thesis, and his analysis will be useful to us in a number of our endeavors.
2. As in the past, we still request a review of topics proposed for theses which use the Quality of Air Force Life Survey data. In addition, we are to be kept in the review chain of such studies prior to their release.
3. Once again, thank you for Patterson's valuable analysis.

Robert L. Butterfield

ROBERT L. BUTTERFIELD, Col, USAF
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